

KIND, BRAVE, & ZESTY:
LEVERAGING CHARACTER STRENGTHS IN IMPACTFUL SOCIAL ENTREPRENEURS
ACROSS CULTURES

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ABSTRACT

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Title: Kind, Brave, & Zesty: Leveraging Character Strengths in Impactful Social Entrepreneurs Across Cultures

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This thesis is a search to answer the first principle questions of: How can we leave the world a better place than I found it? and How can we be happy? That exploration led to research on social entrepreneurship, positive psychology, character strengths, and leveraging character strengths to create greater social impact. The main portion of research is an original study.

75 social entrepreneurs from the USA and India participated in a survey that was based on their personal experience of the problem their organization seeks to solve and preexisting, scientifically sound surveys of character strengths, social impact, and life satisfaction. Results were assessed through quantitative analysis and qualitative research by interviewing study participants. Based on these interviews, survey analysis, and background research, recommendations were made for the best ways social entrepreneurs should apply character strengths. Key results include that kindness was positively and creativity was negatively correlated with social impact. Zest and humility were positively correlated with life satisfaction. Personal experience of the problem a social entrepreneur seeks to solve was negatively correlated with life satisfaction. Applications of these character strengths to create greater social impact are discussed in the thesis’s brief final section.

Dedicated to:

The Wolf Boys, my younger brothers, Benny, Jordan, and Gabe. Thank you for your love and support throughout a life that requires you to follow in my foot steps, for better or worse. I have tried to set a good path for you to follow, but want more than anything for you to be able to carve you own. That said, my hope is that you all growup to be the type of people who care for the world and leave it a better place than you found it. Hopefully you too will find improving lives for others the most fulfilling way to spend your time.

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Chapter 1: At the Nexus of Happiness & Changing the World

Positively Social Synopsis

“Humility is a double-edged sword... it allows our team to have a lot of responsibility... it also means I’m not as persuasive or winsome in fundraising” - Social Entrepreneur A. You may assume this interview with a social entrepreneur, an innovator with a bold enough vision to believe they can make the world better, was happening in an underprivileged neighborhood or an innovative office space where they made the magic happen. Instead, we were basking in the sun at Spiderhouse Coffee as fellow patrons played checkers and board games on a lovely Sunday afternoon in Austin, Texas. My search to understand the Characteristics of Impactful Social Entrepreneurs Across Cultures took me as far as rural Uttar Pradesh, India and as close as the coffee shop down the street. As I explored social entrepreneurship, positive psychology, and my future at the intersection of the two, I learned so much about the personal make up of impactful social entrepreneurs. Hopefully the results of this research will help current and future social entrepreneurs, like me, better utilize the greatest resource already in their possession, personal characteristics, to drive social impact in entrepreneurial endeavors.

My primary research tool to better understand social entrepreneurs was a study I compiled based on preexisting, scientifically grounded surveys of character strengths, personal experience, social impact, and personal happiness. In addition to these quantitative measures, I conducted qualitative evaluations through interviews with study participants. These interviews guided recommendations on best practices for how social entrepreneurs can apply personal characteristics to increase the social impact of their organization.

I provided an overview of social entrepreneurship, positive psychology, character strengths geographically focused in India and the United States to augment my study. The

research, books, and articles I read for this thesis explored the correlation between personality traits and achievement or social impact, personal makeup of entrepreneurs and others finding success in their careers, and applications of character strengths. The lacuna within this canon of research was understanding how this specific research interacts with social entrepreneurs. My study and analysis of best practices helped fill this gap in our community's knowledge base.

Who Am I?

Privilege and Purpose: The First 22 Years

A thesis, like changing the world or pursuing happiness, is not done in a vacuum. A thesis, like any act of invention, has a creator. In this case, that creator is me.

Considering the subject matter of my thesis, it seems especially important to provide context to my perspective. While I attempt to be objective throughout, it is inevitable that in writing about the inexact sciences of social entrepreneurship, positive psychology, and characteristics of impactful social entrepreneurs, I will in some ways be biased by my own experiences and perspectives. Thus, I have decided to follow the footsteps of Jonathan Lewis in *The Unfinished Social Entrepreneur*, and begin this volume by sharing my perspective. I believe this backstory to be valuable both in understanding how I chose this topic and the tinted lens through which I see my research.

My name is Micky Wolf. I am third-generation Longhorn at the University of Texas at Austin studying Business Honors and Plan II Honors with a Psychology minor. I am the oldest of four brothers. My two supportive parents raised us in a spacious home in a gated community where most neighbors were likely among the wealthiest 10% of Americans. I am a white, Jewish, heterosexual male born in Dallas and living in San Antonio, Texas until college. At my diverse, middle to upper-middle class public high school, I was in the top 2% of my class,

student council president, captain of the debate team, and a varsity basketball player. In other words, I had an ideal childhood without significant hardship.

Loving parents who pushed me to excel, a drive to lead initiatives that improve the lives of others, and a great deal of societal privilege led to a successful high school career, for which I was rewarded a Forty Acres Scholarship. This program connected me with some of my closest friends and provided a full-ride plus additional benefits such as connections to alumni, stipends for international experiences, housing & books. I am forever indebted to the scholarship for many reasons, but it is relevant to my thesis because it opened my eyes to how people on 3 continents live. With a service minded heart, I founded service organizations in college including Texas for Expanding Opportunity, Texas Leaders, Improve UT Challenge, and served as Student Body Vice President in Student Government. I also chose to intern with mission-driven organizations such as the Community First! Village, Verb, and The Purpose Institute.

Like All Pursuits, It Started With a Question

For as long as I can remember, it has been in my nature to be inquisitive. Growing up in San Antonio, I was always known as the classmate who asked too many questions and prided myself in winning the elementary school P.E. quizzes on the box scores of San Antonio Spurs game. However, intellectual curiosity was seared into the backstory of my life as a signature character trait the morning I became a “Jewish man” at my Bar Mitzvah. Every 13 year old Jewish child gives a speech sharing the lessons of what they learned from their Torah portion. My Torah portion, Shemini, contains the two middle lines of the entire Torah, translated as “d’rosh d’rash”, or he questioned, questioningly. Old rabbis spent a lot of time contemplating why these words are in the exact middle of the Torah, and offered a few explanations. The endless question asker I was and still am, I conveniently interpreted the phrase’s placement in the

middle of Judaism's most important text, and thus the religion as a whole, as a sign that questioning was a Jewish person's core purpose. Thus, Judaism revolves around the concepts of intellectual curiosity and questioning the world around us. It is our purpose to be curious and question the world as we search for meaning in our lives and daily decisions.

The most important question Judaism and most any major belief system seeks to answer is "what is the purpose of life?" For most religions, that answer is some variation of, "to serve God." However, since my Bar Mitzvah had taught me to seek answers through questions, I have come to believe only two questions somewhat achieve the daunting task of identifying purpose:

How can I leave the world a better place than I found it? and How can I be happy?

UT Austin: Where I Find Answers Pt. 1

My love for social entrepreneurship, defined as using primarily business means to solve social, civic, or environmental problems, began in the lecture series of a professor who became my advisor for this very thesis, Lee Walker. The birth of my perspectives on social entrepreneurship began in JGB 2.218 on Monday nights of my freshman spring semester from 5-7 pm. *Civic Viewpoints* introduced me to the concept of social entrepreneurship. I was exposed to amazing civic entrepreneurs and social innovators using innovative solutions, sustainable revenue generation, metric-driven decision making, and other traditional business practices to solve civic, social, and environmental problems.

While studying abroad the summer after taking *Civic Viewpoints*, I was walking to class under the baking Italian sun when the sight of a bearded man who was homeless reading a book on the sidewalk overwhelmed my heart. I had never seen a person who was homeless sitting with a stack of books on the street before. It inspired the idea for my first social entrepreneurial endeavor. I wanted to create a book based on scientific research about the best ways for the

chronically homeless to get off the streets. The book would be well-written and interspersed with entertaining or inspiring stories containing mass audience appeal. My social enterprise would deliver the book, a backpack of essential supplies, and another book about overcoming struggle to individuals who are homeless. I would generate revenue to fund and grow the organization by selling the book to mainstream customers through Amazon and at bookstores.

During the market research phase of my idea, I was connected to people at the Community First! Village. The Community First! Village was piloting the nation's most innovative approach to fighting chronic homelessness with the nation's first 27-acre master planned community of tiny homes. The Village built social enterprise into the fabric of their sustainable community by providing small but engaging jobs for villagers to contribute to the community and requiring for all guests to pay rent. The organization creating the village believed that the fundamental cause of homelessness was not a lack of education, as creating my book idea implied it was, but a lack of community. Social entrepreneurs must be open to pivoting when the market and beneficiaries indicate they should. So with a suggested pivot from Community First!, I channeled my passion for giving individuals who are homeless access to books by helping to create the library at the Community First! Village.

The summer after my sophomore year I interned at Verb, a social enterprise running global social entrepreneurship competitions in partnership with large brands. The time I spent interviewing social entrepreneurs, researching global social enterprise markets, and reviewing applications from social entrepreneurs in Verb's competitions provided a variety of inspiration for my thesis. Perhaps most impactful, however, was researching social impact organizations for my colleagues to meet with when securing partners for our MetLife financial inclusion competition in India. In these Google searches, I stumbled upon Jagriti Yatra.

I was immediately enamored by Jagriti Yatra's program: an 8000 km journey living on a train looping around all of India and learning from business entrepreneurs, social entrepreneurs, and nonprofit leaders. This enterprise-led development program would expose me to Indian culture through the eyes of fellow young adults who envision themselves as the social innovators of India's future. My parents were initially completely against me spending winter break of my junior year living on the train halfway around the world as the only American and one of the youngest participants on the journey. As any good social entrepreneur should, I listened to their concerns, found an answer to every one, and then made the trip happen.

To help offset Jagriti Yatra's expenses, I applied for an Undergraduate Research Fellowship grant. I knew my thesis would eventually arrive, so I decided to get an early start by applying for the grant with plans to turn my proposal into my eventual thesis. My proposal needed a lens that could help me better understand social entrepreneurs and further their goals of greater social impact. That lens became another new, innovative discipline also using a more scientific, results-driven approach to answering deeply important questions: positive psychology.

UT Austin: Where I Find Answers Pt. 2

At Winston Churchill High School, my senior year AP English teacher gave us a semester long research project. The project could cover any topic, but required the reading of multiple books. Free will, mental disease, and Shakespearean theatre were among the more interesting presentations. I chose to learn about a topic I thought fundamental to the human experience: happiness.

Through books such as *The Happiness Project*, *Drive*, and *Stumbling on Happiness*, I was introduced to the field of positive psychology. Positive psychology can be commonly thought of as the scientific study of happiness, well-being, and leading a more meaningful life.

Four years later, I was surprised to learn a few classmates still remembered my presentation. It turns out that when you play *Happy* by Pharrell, *ABC* by Jackson 5, and other feel good background songs while standing on a desk for your entire presentation and making the class do a gratitude exercise, people remember.

In my first year at the University of Texas I gave little thought to positive psychology. However, one week during the fall of my sophomore year, I saw the movie *Spotlight* and the 30 for 30 documentary on Penn State and Jerry Sandusky. Both movies were about the gruesome realities of men in power molesting children and the institutions that protected these horrible men. I wondered, what type of social enterprise could help the survivors of these abuses? While their lives will forever be altered, one of the most helpful things to provide them with are the tools to heal mentally.

As I thought about this problem and extrapolated it to other social issues, I had a key realization. Happiness and an invigorated life outlook is one of the only solutions that applies to all societal problems. No, that does not mean we should seek to solve poverty, racial inequality, and education issues by simply seeking to make people happier. Still, there are people everyday who are sickeningly impoverished and systematically disadvantaged by their random birthplace in life, yet find meaning and happiness in the simple things. Empowering a person in need with the positive psychology tools to improve their own lives will help them find life more fulfilling in the present as hard work is simultaneously done to correct social injustices and provide them a better future. It was this realization that sparked my interest in combining positive psychology and social entrepreneurship.

A couple of weeks after this epiphany, Thanksgiving break found me in my childhood bedroom in San Antonio. I was perusing my bookshelf when I *stumbled* upon the book

Stumbling on Happiness by Dan Gilbert. I had already been considering adding a 3rd major that semester. Like a ton of bricks, it hit me that I should make that major psychology. Understanding human nature could augment my business education by giving scientific insights into dealing with people. More importantly, it would allow me to dive deep into the field of positive psychology.

I met with positive psychology Professor Caryn Carlson at the end of the fall semester to discuss adding the major and getting involved in positive psychology work on campus. While she usually asks lab participants to serve a full academic year, she noticed my passion and potential and allowed me to join her Well-Being in Context Positive Psychology Lab. She ended up serving as the second reader on my thesis and my mentor in the positive psychology space.

Background on Changing the World: Social Entrepreneurship

Defining Social Entrepreneurship

Social entrepreneurs, as a group of people, are sworn enemies of the status quo. They both question assumptions about how things should be done and are impassioned enough to change it. They envision a world that looks different than the we currently live in and then work tirelessly to make that vision a reality. Considering these communal characteristics, it is unsurprising that various community members and academics offer distinct definitions of social entrepreneurship.

In my thesis survey, I defined “a social enterprise as an organization using primarily business means (i.e., revenue generating business models) to address primarily societal ends (i.e., goals related to society/the environment).” A definitional threshold not feasible for my survey, I think 60%+ of a social entrepreneur’s means and ends need to align in this manner to meet the definition. I proposed this definition because it spoke to the heart of my research. It helped

distinguish social enterprises from traditional nonprofits (based on means) and socially responsible businesses or corporate social responsibility (based on ends). I did not specify if it had to be nonprofit or for-profit. I also did not specify that it had to generate revenue as long as it was being run like a business in other ways. This may include results-driven decision making, sustainable funding sources, lean methodologies, rigorous measurement of success, or an innovative model compared to the industry norms.

Amongst the social entrepreneurship community, there is a debate between a “small tent” definition which would narrowly limit the term versus a “large tent” definition that provides for more inclusive interpretations. On the spectrum of defining social entrepreneurship, my definition is relatively middle of the road, though perhaps leaning ever so slightly toward the small tents. What follows are some of the foremost thinkers from each side of the debate.

Social entrepreneurs can be considered the cousin who lacks clarity between two sides of their family: the traditional entrepreneur and the nonprofit leader. Social entrepreneurs are distinguished from the traditional entrepreneur by being driven not to simply increase profits, but to solve a societal or environmental issue. They are distinct from nonprofit leaders by using business practices to improve the efficiency and sustainability of their organization.

Some people believe the definition around social entrepreneurship must be constricted to avoid every socially beneficial activity being included. They argue, “social entrepreneurship is an appealing construct precisely because it holds such high promise. If that promise is not fulfilled because too many “nonentrepreneurial” efforts are included in the definition,” (Martin & Osberg, 2007) the public will never truly understand the movement’s power and it will never gain mass acceptance.

The theory behind a narrow definition is that it will help the term grow in popularity while avoiding the negative criticisms that the larger social sector sometimes incurs (little social impact, bureaucratic, slow etc.) A narrow definition allows for potential funders to know exactly what they are supporting. Martin and Osberg's definition, "take direct action and seek to transform the existing system," with the goal of "forging a new equilibrium that unleashes new value for society, releases trapped potential, or alleviates suffering," distinguishes social entrepreneurship from social services or social activism (Martin & Osberg, 2015). This distinction exists because social service providers seek to alleviate suffering, not change the entire system. Meanwhile, social activists seek to influence others to change the system with indirect action.

Jonathan Lewis, in *The Unfinished Social Entrepreneur*, stands on the other side of the definition camp. His book about social entrepreneurship begins with the speech of a California state senator. He uses dozens of terms interchangeably such as change agents and social justice activist. For him, arguing about the precise definition of social entrepreneurship is of little importance compared to the act of actually doing social entrepreneurship. He believes the definitional debate is a fool's errand for academics, not practitioners. His big tent approach applies the principles of an entrepreneurial nature to all aspects of social change because he believes the goals of social justice outweigh the limitations provided by a stricter definition.

Zoe Schlag of Techstars Impact also argues against a strict definition of social entrepreneurship. She prefers using examples to show what social entrepreneurship is as opposed to sharing an exact definition. However, Techstars Impact inspires a debate on legal terminology. Their accelerator, like some impact investors, only invests in for-profit social enterprises. Bill

Meehan, Stanford Graduate School of Business Professor and *Engine of Impact* author, believes social enterprises should be nonprofits because “that’s where the social impact is.”

Many practitioners believe social enterprises can be either nonprofits or for-profits. However, the strict legal ramifications of those definitions can make it difficult for social entrepreneurship to gain traction, especially in emerging markets. Often people will discount a for-profit’s effort to do good as white-washing or disingenuous. Others consider a nonprofit generating profits as antithetical to the mission of the organization, and would prefer to see people’s time and financial resources go to other more traditional philanthropies.

The B Corps organization, which certifies for-profit companies as “social enterprises”, has led the charge in spurring the benefit-corporation movement. The public-benefit corporation, a legal classification based on the B Corps definition, exists in Texas and has gained traction to help tax laws better categorize and equitably reward these organizations. Just as a traditional corporation is obligated to maximize profit, Delaware’s public-benefit definition requires a company “to identify in their certificate of incorporation a specific public benefit purpose the corporation is obligated to pursue” (Markell, 2013). The low-profit limited liability company (L3C) is another legal form of social enterprise that exists in about 10 states. The debate over legal definitions will continue, but having tax codes that reflect the limited earnings potential of a social enterprise while recognizing its ability to earn revenue is crucial. Its help increase society’s understanding and use of social enterprises as tools to solve social issues.

Brief History of Social Entrepreneurship

Social entrepreneurship was a term initially coined by Bill Drayton in 1980 when he founded Ashoka, an international organization that empowers changemakers and social entrepreneurs around the world with resources and mentorship. An American, Drayton named

this organization after Ashoka the Great, an Indian emperor during 200s BCE known for creating a more socially just dynasty. However, even without the watershed moment of Drayton's definition, using innovation and business to solve social issues has existed in some form or fashion for hundreds of years.

Florence Nightingale, founder of modern nursing, transformed healthcare with innovations that relate to business principles of metric-driven decision making and revenue generation. She created professional schools for nurses and was involved in the construction of modern hospitals. A true social entrepreneur, "her work had an enormous social impact, but also resulted in improved efficiencies in the way hospitals were built and managed." (Krige, 2013)

William Lever's goal in the 1800's was to make cleanliness commonplace. He revolutionized and scaled the selling of soap at a time when all soap was handmade. The company he founded became Unilever and sticks to its strong social mission till this day.

Alexander Webster and Robert Wallace, Scottish clergymen in the 1700's, sought to address the issues of ministers' widows at a time when life expectancy was 37 years old. Webster and Wallace developed a plan for clergymen to pay "an annual premium to a fund that would pay an annuity to widows and orphans after [the death of their husband or father]." (Krige, 2013). The fund was invested profitably to achieve ongoing returns. Not only did the fund help those in need currently, it laid the foundation for modern insurance and the profession of actuarial science.

Jamsetji Tata, founder of India's largest multinational conglomerate, the Tata Group, created the JN Tata Endowment in 1892 to support study abroad opportunities for Indian students. His vision led to the creation of four organizations: a hotel company, hydraulic power

company, steel company, and educational institution. To this day, Tata Trusts, the nonprofit foundation of the Tata family, owns a major stake in Tata Group businesses.

A more specific comparison of the history of social entrepreneurship in India and the U.S. is described in *Similarities and Differences Between India & America*.

Part of a Larger Movement

When interning at Verb, a social enterprise running global social entrepreneurship competitions, I was surprised to hear our Chief Product Officer mention that he felt social entrepreneurship was just a business fad and an unsustainable long-term solution to social problems. I believe social entrepreneurship is a permanent solution to social issues because:

It is the future of business. Businesses are becoming more socially conscious in response to demands from employees, investors, and consumers. We have seen an increase in Corporate Social Responsibility and companies engage employees through donation matching or company-wide days of service. 66% of consumers are willing to spend more to buy from a sustainable brand. This fact is true for 73% of millennials. 81% of millennials expect companies to make a public commitment to good corporate citizenship and 91% would switch brands to ones associated with a cause (Landrum, 2017). BlackRock, Inc., with nearly \$5.7 trillion in assets under management, is the largest investor in the world. Their CEO, Larry Fink, wrote in his 2018 letter to public companies: “every company must not only deliver financial performance, but also show how it makes a positive contribution to society” (Fink, 2018). This trend will only continue to grow.

It is the future of nonprofits. In the nonprofit space, there has been a push for increased transparency that includes nonprofit rating systems such as Guide Star and Charity Navigator, and demand for nonprofits to prove the social impact metrics behind their work. Donors are

holding nonprofits more accountable to stretching dollars further and finding sustainable funding sources such as revenue. Influential foundations created by successful business entrepreneurs such as the Omidyar Network, Skoll Foundation, Gates Foundation, and Chan Zuckerberg Initiative are pushing non-governmental organization (NGO) leaders to be more efficient, innovative, scientific, and research oriented in their decision making.

It is the progression of capitalism. Throughout history, capitalism has been used to exploit the underprivileged and grow wealth inequality throughout the world. Marxism, the other dominant economic system of the last few hundred years, envisioned a huge revolution led by the exploited working class to overthrow the elite capitalists. However, instead of a revolt, capitalism has become kinder throughout time in response to the very real exploitation it has caused. These varied responses includes the growth of unionization, outlawing of child labor, and introduction of a minimum wage. In *Conscious Capitalism*, John Mackey, founder of Whole Foods, speaks to a future where businesses create Win-Win scenarios for all of their stakeholders. The 2008 financial market crash accelerated the belief that pure profit-maximization is not sustainable for our long-term future. The problems with capitalism still exist as India and the United States continue to experience growing income inequality and millions of people are still exploited by the system. However, the arch of capitalism is long and it trends towards a more socially just, conscious version of itself.

Governments and NGOs cannot solve world problems alone. The problems the world faces are large and require complex solutions that cannot simply involve governments or NGOs. International development has, at times, led to more harm than good. Businesses and governments alike have caused substantial exploitation, war, and climate change. However, in the 21st century, businesses, NGOs, governments, and social enterprises will need to work in

unison to solve our problems. Social entrepreneurship is often the binding agent amongst these diverse organization types. For example, consider the supply chain of an international clothing manufacturer. Government incentives, employment practices, NGO know-how, and company commitment must come together to drive the type of solutions needed to create a sustainable supply chain. However, if that company were a mission-driven organization like Patagonia, they would be setting the standard for responsible clothing instead of being forced into it with carrot and stick incentives.

Social Enterprise Business Models & Examples

Social enterprises use a variety of business models to sustain their social impact. This list is not meant to be exhaustive, but instead provide a flavor of the types of business models used to drive social impact. These models can be used by for-profit, nonprofit, or benefit-corporations. They can also be combined to create comprehensive impact models.

Beneficiary is the customer. In this model, the people a social enterprise seeks to impact are the ones paying for its service or product. This is generally considered to be one of the most powerful growth models because the financial success of the business is directly reliant on whether it is actually improving lives of its beneficiaries. However, this model is difficult to scale when working with beneficiaries in extreme poverty. The concept of microfinance, for which Bangladeshi Professor Muhammad Yunus won a Nobel Prize, has seen organizations grow into global, public companies using this model. The basic concept is to give people at the bottom of the pyramid who have no credit access to microloans that support their entrepreneurial endeavors. As long as they continue paying back their loan, they can continue to borrow. Most borrowers continue borrowing at increased loan sizes. This increase and the scale to reach thousands or millions of people funds the growth of microfinance institutions.

Customers support the beneficiaries. This example is more common than beneficiaries as customers. It involves a customer paying for a service or product that allows the social enterprise to either directly or indirectly benefit people in need. For example, UR Welcome Technologies has created the first mobile technology platform for immigrants to America. The platform is free for immigrants and connects them to government services, financial information, job opportunities, healthcare, and more. UR Welcome is paid by corporate partners who hope to access a coveted market of millions of potentially loyal immigrants by offering discounted services. For example, H&R Block would pay UR Welcome to be the promoted company for tax preparation services. Another company that uses this model is Andela. This social enterprise trains the top 1% of software developers on the African continent to get jobs at the world's top tech companies. Andela creates a win-win-win-win scenario by generating revenue from their customers, companies like Facebook and Google. These tech giants are able to start closing the talent gap for topnotch software developers while paying less than they would hiring a software developer in San Francisco. The African software developers are receiving amazing training, handsome salaries, and experience at topnotch tech companies that they will carry throughout their career. Finally, these African communities are gaining supremely talented developers with hopefully a few becoming social entrepreneurs themselves someday.

Entrepreneur support organizations. Many social enterprises make a difference by giving other social entrepreneurs resources to deepen their social impact. This can be done through impact investors such as Acumen Fund, accelerator programs such as Techstars Impact, or a network and fellowship like Ashoka. Microfinance overlaps and is another form of this type of organization.

Providing employment and marketplace opportunities. These social enterprises empower people, often at the bottom of the pyramid, with job training or a marketplace to sell their products. Etsy's marketplace of handmade goods is an example of this at the largest scale, a public company. However, many smaller organizations empower impoverished women in developing countries by selling their handcrafted goods at fair wages in the international market. Many organizations provide employment opportunities for those disadvantaged. For example, Easterseals, an organization in Austin, operates landscaping services by employing people with disabilities.

Fee for service. This business model is in the name: a social enterprise charges some sort of fee for the service they provide. Penpal Schools improves education by connecting K-12 students around the world through physical and digital pen pal programming. The company scales as more schools pay a fee for its services. However, a fee does not always need to be monetary. For example, Gram Vikas builds water wells and bathrooms to improve water and sanitation in rural villages in India. However, before they build the well, all 100% of the village must commit to paying in some fashion for the new water system. Villagers are able to pay financially, but often do so by committing time and labor to building the well or bathrooms. By doing this, Gram Vikas establishes a sense of ownership and pride within the village. The community wants to keep their well and bathrooms clean so that they sustain for years. This strategy is a win-win for Gram Vikas because it also substantially reduces their labor costs.

Service subsidization. In this model, a group of paying beneficiaries helps cover the expenses for beneficiaries receiving services for free or at a reduced cost. Everytable is a social enterprise in Los Angeles that aims to make nutritious, fresh food affordable and accessible to all by selling healthy meals at fast food speeds. They sell a takeout box for \$5 at their locations in

underprivileged neighborhoods in food deserts while selling it for \$8 in their locations in more affluent areas. Aravind Eye Care system in India has served its mission to end needless blindness by substantially scaling a service subsidization model. They perform some of the world's most consistently successful eye surgeries at a fraction of the cost and nearly triple the speed of competitive British hospitals. They perform free surgery for anyone who needs it. Those expenses are subsidized by those who can afford the surgery, with 1 paying customer covering costs for 3 free ones. Paying customers go to Aravind because the quality of care is unparalleled.

Sell One Give One. In this model, a business will provide a matching product donation for every sale. Warby Parker, for example, gives away a pair of glasses for every pair they sell. Proud Pour, a winery, uses a variation of this model. For every bottle of wine they sell, they commit to environmental restoration equivalent to saving X amount of oysters or bees.

Conscious companies. These are for-profit, at times, public companies that want to create win-win solutions for all of their organizational stakeholders, including the environment. Patagonia has fully ingrained eco-friendly into their entire supply chain including using organic cotton and offering repair and reuse for damaged gear. They find success because customers will pay more to support sustainable, eco-friendly, and high-quality products. Ampere Vehicles sells electric bikes and mopeds in India. While these vehicles are essential for consumers' transportation, consumers purchase them for the added benefit they offer the environment and the company's commitment to creating modified vehicles for those who are physically disabled.

Beneficiaries include all humanity and/or the environment. Some social enterprises use a model that benefits the world, regardless of whether it impacts the individual consumer. When a customer buys a solar panel, it can initially increase their energy bill, but it is beneficial for humanity's future on the Earth. Sometimes, both the consumer and the world benefit. For

example, Impossible Foods, creator of plant-based meats that taste real, are backed by \$400 million in investments from investors such as the Gates Foundation and Google Ventures. They will create a serious long-term environmental benefit by weaning the world off of environmentally destructive animal agriculture. They also directly benefit the consumer, who will eat much healthier by consuming plants instead of meat.

Background on Pursuing Happiness: Positive Psychology

A Brief History of Positive Psychology

In his 1998 address as president of the American Psychology Association, Dr. Martin Seligman, a psychology professor at the University of Pennsylvania, officially coined the term positive psychology. As Martin Seligman described it in his speech, positive psychology is a “reoriented science that emphasizes the understanding and building of the most positive qualities of an individual: optimism, courage, work ethic, future mindedness, interpersonal skill, the capacity for pleasure and insight, and social responsibility” (Seligman, 1998). Positive psychology can be generally described as the study of happiness, well-being, and living a fulfilling life.

The creation of a field of positive psychology was focused on shifting psychology toward being a science that helps all people live more fulfilling and productive lives. As Seligman noted, the field of psychology since the end of World War II became dominated by the extremely important topic of mental illness. Positive psychology was created to refocus psychology on understanding human strengths. Seligman envisioned a world of psychology that was not just used to treat mental illness, but to “show the world what actions lead to well being, to positive individuals, to flourishing communities, and to a just society... what kind of families result in the healthiest children, what work environments support the greatest satisfaction among workers,

and what policies result in the strongest civic commitment” (Seligman, 1998). In this way, positive psychology is an outgrowth of how psychology looked in the latter half of the 20th century while making its findings relevant to all people.

“Positive psychology 2.0” or “Second wave positive psychology” are terms used to reflect the subsequent course correction of positive psychology and an understanding that we cannot simply ignore the more negative aspects of life. Positive psychology 2.0 provides a yin-yang perspective; a balanced approach between understanding that without the negative aspects of life, the positive aspects lack true appreciation/meaning. This second wave positive psychology reconciles a world where a broader sense of well-being means understanding how to deal with the subtle, dialectical nature at play between positive and negative aspects of psychology health. Second wave positive psychology also provides a broader view of the potential contributions of the field in serving those experiencing mental illness, including depression.

How to be happy?: Evidence-based results

Positive psychology has developed a 21st century understanding of life satisfaction that is backed by empirical research. It has provided a greater understanding of what makes people fulfilled in the short and long-term along with successful interventions to increase people’s sense of well-being.

One of the most successful areas of intervention research involves gratitude. “The practice of counting blessings was linked to fewer physical symptoms, more optimistic life appraisals, and more time exercising and improved well-being and optimal functioning” (Emmons & McCullough, 2003). For example, a recent randomized controlled study of adults seeking university-based psychotherapy services found that, relative to receiving therapy or

therapy plus expressive writing , those who completed a gratitude task (psychotherapy plus writing letters of gratitude to others) reported better mental health 4 weeks and 3 months after the intervention (Wong, Owen, Gabana, Brown, Mcinnis, Toth, & Gilman, 2016).

Another topic that has been a focus of the field is increasing evidence of the critical importance that social relationships play in people's satisfaction with life. The most overarching conclusion from Harvard's Grant study, a 80+ year old longitudinal study on living a happy and healthy life, is that close relationships, social bonds, and community are the greatest determinants of happiness. People are social creatures who want to love and be loved at a fundamental level so it is logical that the greatest driver of their happiness is relationships. In a study of 200,000 people, doubling someone's pay increased their happiness by 0.2 on a 1-10 scale while being in a relationship increased happiness by 0.6 (Laird et al., 2016).

Considering that one of humankind's' most sought after objectives is accumulating wealth, positive psychology has been interested in evaluating the correlation between wealth and happiness. On the one hand, one of the strongest predictors of well-being both within and across countries is average per capita income and on average, wealthier people are happier. Many of these effects, though, are significantly reduced when discounting the poorest countries and people. Experiential wellbeing (i.e., moment-to-moment experiences of positive affect) increases linearly with income until a level of about \$75,000 was reached; thereafter, there was no association with increased income and increased happiness (Kahneman and Deaton 2010).

It is noteworthy that Americans are less happy today on average than they were in the 1940's despite a 30% increase in household income since the 1970's and massive improvements in daily comfort. Thus, making more money does not in itself make one happier. This phenomena has been termed the Easterlin Effect, which hypothesizes that as people makes more

money, they become more influenced by social comparison and adaptation to their new social status (Clark, 2014). This “keeping up with the Jones” quest and the materialist drive to always desire more can even limit the happiness of millionaires who strive to be billionaires.

Additional topics in positive psychology

Flow. One aspect of positive psychology that has received much attention revolves around the concept of flow. In common terms, being in a state of flow is when a person is “in the zone”, so focused on and engaged in an activity that they lose track of time and will often disregard basic needs such as hunger or fatigue. Mihalyi Csikszentmihalyi, the famed 1970’s psychologist, defined this concept while studying painters, chess players, athletes, surgeons and pilots. It is considered to be an optimal state of being that balances challenge and skill level. In a flow activity, a person is challenged at the right difficulty level to get better as they experience accomplishments along the way. Flow is considered an optimal human state of mind.

Meditation & Mindfulness. The ancient Buddhist and Hindu practices of mediation and yoga have laid the foundation of the modern study of mindfulness. Much research on the benefits to someone’s daily state of mind has come from research on the benefits that meditation and mindfulness bring to an individual’s health as well as daily experience of peace, gratitude and love.

Motivation. The book *Drive* by Daniel Pink discusses the evolution of systems of motivation. Motivation 1.0 was when people were motivated by basic needs of survival. Motivation 2.0 is the extrinsic motivation system of the industrial revolution that involves a carrot and stick system and assumes humans are motivated by punishments or rewards. Motivation 3.0 is the system that Pink describes as how humans in the knowledge economy operate. It is based on Deci & Ryan’s well-known self-determination theory, which states that

humans strive to meet their basic psychology needs of competency/mastery, autonomy, and relatedness to other people. Pink believes a fourth factor, purpose, also drives humans to do more on a daily basis. This understanding of intrinsic motivation as the true illuminating force behind human drive is one of the most exciting areas of development for positive psychology research.

Character strengths. This important aspect of positive psychology, the study of the positive aspects of individual humans, will be discussed in more detail in Character Strengths Background Research.

Nexus of Social Entrepreneurship and Positive Psychology

Lens of Similarities

It is a bit hard to tell if I am only connecting the dots looking backwards, but I believe my passions for both social entrepreneurship and positive psychology stem from a similar place. Martin Seligman, in his 1998 speech that marked the official birth of positive psychology, points out a baseline connection connection when he said that positive psychology will be a “reoriented science that emphasizes the understanding and building of the most positive qualities of an individual: optimism... and social responsibility” (Seligman, 1998). I am always focused on the next innovative approach or solution and make decisions based on the best reasoning, not intuition or emotion. It is the high school debater in me that always wants to understand the warrants for a certain mode of thinking. I consistently ask why and dismiss answers that do not sufficiently meet the bar of rationality.

Social entrepreneurship and positive psychology are aligned in their focus on bringing innovative and data-driven, warranted answers to age-old problems. They approach problems that have traditionally been considered subjective matters in an objective, scientific way. For thousands of years, both Western and Eastern ideology and practices have been interested in my

life questions of how to be happy and how to improve the world. Historically, answers have been found primarily within the realms of philosophy and theology. Thanks to advances in human enlightenment and science, social entrepreneurship and positive psychology have risen to the forefront in the last 20 years as outgrowths of humanity's long search to answer these questions.

Viewed through this lens, social entrepreneurship is an innovation to the various forms of how people sought to improve the world. It comes after a litany of other answers: religious piety, charity, city-states, democracy, capitalism, nonprofits, NGOs, and communism to name a few. The difference with social entrepreneurship is that it combines an innovative approach - the sustainable business model - with data-driven decision-making that seeks to truly understand whether a social enterprise is delivering social impact by using impact metrics.

Positive psychology follows a long list of humanity's answer to what makes people live meaningful, fulfilled lives. Following God(s), Jesus, idols, and the noble eightfold path to enlightenment are all presented as religious solutions to finding happiness or meaning in life. Philosophers and academics alike would say that knowledge is happiness and thus people should explore for truth. Adventurers and entrepreneurs will say that creating something new or experiencing all that life and a career can offer is happiness. Capitalists and much of American culture will say that wealth brings happiness. Individualist cultures like the United States or collectivist cultures like India both present their own solutions: meaning is found in self-expression or happiness is found in community bonds. All of these approaches have merit and some semblance of truth but they are limited. The innovation of positive psychology is in its use of rigorous, data-based approaches to determine what happiness truly entails.

Organizations & Positive Psychology

Much of positive psychology can be applied to the world of business, management, and operating organizations. Intrinsic motivation research shows a better way to motivate team members and structure a work environment that builds on the principles of autonomy, mastery, relatedness, and purpose. Giving employees the power to decide how and in what ways they accomplish their work, allowing them to build a deep expertise in a certain area of business, working in teams, and finding motivation in the organization's purpose are just a few ways that, based on Daniel Pink's motivation 3.0, businesses can motivate their employees.

Tony Hseish's book, *Delivering Happiness*, applies the principles of positive psychology to running an international technology company, Zappos. Tony's focus on radically surprising and delighting customers is ingrained all aspects of his company culture. At Zappos, everything from hiring and promotion practices to customer service and vacation policies are put in place with the research of positive psychology in mind.

Similarities and Differences Between India & America

My research focuses on comparing social entrepreneurs in India and the United States because of the similarities and differences in the countries' social entrepreneurial ecosystems. The world's two largest democracies, they are increasingly supportive of social enterprise and assign great value on living a good life, though they define that good life differently. Of 44 countries, the United States and India are ranked 1st and 14th, respectively, as the best countries in which to be a social entrepreneur (Thomson Reuters Foundation, 2016).

Both countries also face widening income inequalities, racial tensions, human trafficking, the effects of climate change, and possess healthcare and education systems in need of serious improvements. Despite growing GDP at 7.6%/year, 35% of rural Indians are illiterate and in

2013, 30% lived below the poverty line of \$1.90/day (Business Today, 2016). According to Pew Research, American children ranked 38th in math and 24th in science in testing compared across 71 countries (Desilver, 2017). The issues these countries face are threatening their futures.

Broadly speaking, the Western and Eastern hemispheres have societal cultures that are distinct based whether they are more individualistic or collectivist. Individualistic cultures uphold the individual human being as the gold standard. People think in “I” before “we”. In collectivist cultures, the highest value is placed on the community. People in “we” before “I”. When comparing America and India, we see this divide. America is one of the most individualistic societies in the world and India is one of the more collectivist societies. Two important metrics to compare countries in this way are Individualism, defined above, and Power Distance, defined as the extent to which lower ranking individuals in a society accept that power is distributed unequally. On scales of 1-100, America scores 91 in Individualism and 40 in Power Distance while India scores 48 in Individualism and 71 in Power Distance (Hofstede Insights, 2016). Americans are more likely to strive for individual recognition while Indians generally place greater emphasis on the communal good.

The United States, with roots that combine a distrust of big government and community-based towns initially reliant on charity being the only way to help the poor, has always had a strong culture of nonprofits. The creation of a federal income tax in 1913 brought with it a legal definition of charity and donations. American Titans of Industry during the 19th century like Leland Stanford, Andrew Carnegie, and Cornelius Vanderbilt supported the creation of topnotch universities. The Ford Foundation and Rockefeller Foundation, to this day, are still among the world’s largest charitable organizations. In a country known to idolize wildly successful

capitalists like those mentioned above, this culture has naturally translated to a country that emphasizes social entrepreneurship.

While India has only been independent from England for the last 70 years and has spent much of that time dealing with a moderately corrupt government, she has witnessed the democratization of Indian business. This emphasis on business also values socially driven organizations to help masses of Indians rise out of poverty. 5 of India's 7 "most innovative companies" are socially driven (Fast Company, 2018). Tracing roots back 160 years, TATA Enterprises has focused on building an empire that both serves the rich and gives back to the poor. However, the growing divide between urban and rural people has only served to exacerbate the problem and calls for deeper action.

In terms of positive psychology, both cultures care deeply about pursuing happiness, though with their own twist. For many Americans, happiness has become stereotyped as making money and achieving materialistic wealth. Americans also claim religious piety, individual expression, and strong nuclear families as sources of life satisfaction. India is a country that values spirituality before religion and sees a great value in strong extended families. People are more likely to share willingly or find joy in song and dance.

Interaction Between the Two Fields

Generally speaking, there is little direct research on topics at the intersection of positive psychology and social entrepreneurship. Some tangentially relevant research on well-being and altruism is discussed in the next section. While there are social enterprises that apply principles of positive psychology, or positive psychology researchers and practitioners who want to drive social impact, there is little in terms of researching categories of overlap between the fields.

Background Research for Survey: Character Strengths, Satisfaction with Life, & Success

The survey I provided to social entrepreneurs was built on the results of other research in the fields of positive psychology and social entrepreneurship. Specifically, my research is based on the idea that there are significant correlations between a person's achievement of goals (in this case, the goal of delivering social impact), their character strengths, their life satisfaction, and their influential personal experiences. This section will explore the connections currently in the literature. This literature informed much of my research design, methodology, and hypotheses.

Character Strengths Background

Character strengths represent durable positive individual characteristics and are considered to be the basic building blocks of human goodness and flourishing (Peterson & Seligman, 2004). While many forms of personality and character typologies exist, this is the most widely used and scientifically studied character list emerging from the positive psychology field. With the help of 53 scientists over 3 years, Peterson & Seligman led rigorous analysis to create a comprehensive understanding of human flourishing. Character strengths and virtues have been determined to be universal across cultures, nations, and belief systems (Dahlsgaard, Peterson, & Seligman, 2005; Park, Peterson, & Seligman, 2006). Over 1 million people have taken the scientifically validated character strengths survey.

A typical practice in the field is to focus on an individual's top 3-7 signature character strengths, which represent the core parts of someone's best self. These are strengths that are displayed the majority of time in relevant settings, involve a sense of authenticity ("this is the real me"), are easily recognized by others as characteristic of the individual, and are invigorating to use (Peterson & Seligman, 2004).

People possess character strengths in varying degrees and express strengths differently based on situational context. The 24 character strengths are broken down into 6 virtues. When a survey is taken, they are ranked in order from 1-24 with top 3-7 considered the signature strengths. The virtues and their ensuing list of strengths are as follows:

Wisdom: Creativity, Curiosity, Love-of-Learning, Perspective, and Judgment

Courage: Bravery, Honesty, Perseverance, and Zest

Humanity: Kindness, Love, and Social Intelligence

Justice: Fairness, Leadership, and Teamwork

Temperance: Humility, Forgiveness, Prudence, and Self-Regulation

Transcendence: Appreciation of Beauty & Excellence, Gratitude, Hope, Humor, and Spirituality

The most commonly endorsed character strengths reported are (in descending order) kindness, fairness, honesty, gratitude, judgment, while the least endorsed character strengths are prudence, modesty, and self-regulation (Park, Peterson, & Seligman, 2006). This ranking, which has been found to be consistent across multiple countries, can be considered a baseline against which to compare relative strength endorsement across specific groups of people, which in the case of my study is social entrepreneurs.

Personal Experience & Entrepreneurial Success

One important area of study for my research is understanding a connection between someone's personal experience of the problem they seek to solve and their social impact. There has been a growing emphasis, especially in the world of for-profit technology startups, on founders who are motivated to solve a problem that they first experienced themselves. Many people believe that these are the companies that find the most success. Similarly, the argument

can extend to social entrepreneurs in that they must fundamentally understand the biggest pain points for the underprivileged.

Paul Graham, founder of the world's most prestigious startup incubator, Y Combinator, believes that technology company founders who have experienced the problem they're solving are the best type. He writes, "the way to get startup ideas is not to try to think of startup ideas. It's to look for problems, preferably problems you have yourself... At YC we call ideas that grow naturally out of the founders' own experiences "organic" startup ideas. The most successful startups, [including Microsoft, Apple, Yahoo, Google, and Facebook,] almost all begin this way" (Graham, 2012). If you are a target user for your enterprise, it makes it quite easy to generate new product versions and test them on a user, yourself. However, most organic startup ideas usually don't start off as startup ideas because they just seem like interesting products to build that will fill a gap in the current market. Graham advises potential founders to live in the future, "work on hard problems, driven mainly by curiosity, but have a second self watching over your shoulder, taking note of gaps and anomalies" (Graham, 2012).

In an article on lean startup methodology for social enterprises, it is advised to "get an intimate understanding of your beneficiaries' daily lives, their needs and concerns, their dreams and desires, their role in the community... what are their pains and what would they like to gain from your solution?" (Horn, 2017). Talking to dozens of potential beneficiaries to gain a deep understanding of a problem is a useful and relevant substitute for not experiencing the problem.

A study of 1,700 private entrepreneurs in China considered how likely they were to participate in China's largest social entrepreneurial program, Guangcai (Glorious) Program. The study found that the personal experience of hardships was significantly correlated with those who participated in the program. Specifically, those with lower educational levels or who had

created startups in small, rural cities and villages ($p < .01$) or had experience of unemployment or working in rural poverty ($p < .05$) were more likely to participate (Yiu et al, 2014). This shows that personal experience of the problem encourages entrepreneurs to solve social problems.

Some believe that certain kinds of “entrepreneurial opportunities can only be discovered and acted upon at a very local level. The implication is that distant actors generally lack the relevant facts and knowledge essential to identify, frame and evaluate a potential opportunity” (Zahra et al, 2009). Thus, for certain problems, social entrepreneurs must have a personal understanding of the problem. Without it, “many indiscernible or unrecognizable social needs would remain unaddressed and off the radar screens of larger and less proximate parties.” (Zahra et al, 2009).

Personal experience of the problem is valuable to solving social problems. However, for those without such experience, a privileged background can be used to uplift those who the system has disadvantaged.

Positive Psychology & Success

A substantial body of research shows how a positive and content mindset creates success. Shawn Achor’s book, *The Happiness Advantage*, lays out a vision based on positive psychology research. Achor’s thesis is that people must find an outlook of happiness and optimism before success, as opposed to only being happy once they are successful, to achieve greater results.

Achor discusses research that only 25% of job success is predicted by IQ, while 75% of job success is predicted by your optimism levels, social support, and ability to see stress as challenge, not a threat. These predictive factors can be measured in my study by the character strengths of hope, social intelligence, and perseverance. On a basic level, this intuitive yet profound key to what Achor calls the happiness advantage make sense. If your brain is selecting

among the mental states of positive, negative, neutral, and stressed, it is natural that a positive mindset brings more success because a person with it assume they are going to be successful.

This happiness advantage, which is captured by the Satisfaction with Life Scale used in my survey, helps in many organizational outcomes. When people are operating in a positive state of mind, they are 31% more productive, 37% more successful in sales, and doctors are 19% better at giving correct diagnosis than within the negative, neutral, or stressed mindset (Achor, 2010). Finally, optimistic CEOs receive higher performance ratings from the chairpersons of their boards and head companies while delivering greater returns on investment (Pritzker, 2002).

The inclination and first response many people will have is, “this is just correlation, not causation. CEOs that are making money will be happy and optimistic because they are achieving success, not achieving success because they are happy.” It is, however, both logical and supported in longitudinal studies for happiness to precede success. If a leader is chasing success with the thought that once they achieve a certain goal they will be happy, they will never find happiness. At every stage of success, there is always something more to achieve and a higher stage to reach. In a study comparing siblings, a 1-point increase in life satisfaction (on a 1-5 scale) at age 22, is associated with an annual salary that is nearly \$2,000/year higher at age 29 (De Neve & Andrew Oswald, 2012). This is just one of many ways in which a higher satisfaction with life score leads to a greater achievement of success.

Positive Psychology & Social Impact

At a baseline level, those who are happier tend to be more giving and caring to others. This makes sense as social relationships are generally considered to be the greatest predictor of happiness, and those striving to deliver a social impact to the world usually do so with a focus on other people. In *Give & Take* by Adam Grant, he discusses three types of personality types when

it comes to relationships with others. Takers generally seek personal gain in their relationships. Matchers feel a strong sense of reciprocity and fairness; they seek equal benefits in their relationships. Givers are those who generally seek to give to others without seeking a return. Grant uses examples of both business and nonprofit leaders to convey the idea that givers find more success across a variety of fields, especially when it comes to making a social impact.

In the exploration of the emotion known as elevation, people who witness kindness between strangers feel a profound sense of happiness and are more motivated to deliver social impact themselves. For example, studies have shown that those who witness moral excellence, such as watching a leader discuss their mentors on Oprah, are significantly more likely than a control group to give more generously of their time on boring tasks such as taking a math test (Algoe & Haidt, 2009). This phenomena accounts for why people are more inclined to do kindness onto others after witnessing the pope kiss the feet of the impoverished.

There is evidence to suggest that altruistic behavior and happiness are correlated. Research with a significance level of $p < 0.01$ and a correlation of $r = 0.213$ shows there is a direct link between altruism and the presence of meaning in one's life (Soosai-Nathan, 2015). Quite a few studies in the early 2000's also confirm an association between altruistic activities and both well-being and life satisfaction in older adults (Dulin & Hill, 2003; Liang, Krause, & Bennett, 2001; Morrow-Howell, Hinterlonh, Rozario, & Tang, 2003). However, these clear connections between doing good for others and subjective well-being do little to directly link the larger fields of social entrepreneurship and positive psychology.

Have you heard the story of why the investment banker left his unfulfilling career to start a nonprofit? Hint: it wasn't because he thought he would make more money. Happier people are

more likely to deliver social impact, and those delivering social impact are more likely to feel they are leading happier, more fulfilled lives.

Character Strengths & Life Satisfaction

Character strengths generally: “are hypothesized to facilitate the fulfillment and growth of individuals and the environments in which they flourish (Peterson & Seligman, 2004) and have been associated with several positive psychological conditions such as well-being (Seligman, 2011) [and] positive affect (Littman-Ovadia & Lavy, 2012).” Five character strengths show a consistent, robust relationship to life satisfaction: Hope, zest, gratitude, curiosity, and love (Park, Peterson, & Seligman, 2004). Character strengths with the lowest relation to life satisfaction (weak association) are modesty/humility, creativity, appreciation of beauty & excellence, judgment, and love of learning (Park, Peterson, & Seligman, 2004).

“Strengths of the “heart” (e.g., love, gratitude) are more strongly associated with well-being than are strengths of the “head” (e.g., creativity, judgment, appreciation of beauty and excellence)” (Park & Peterson, 2008b; Park, Peterson, & Seligman, 2004). There are generally considered to be three types of happiness: meaning, engagement, and pleasure. “Character strengths most associated with the *meaning* route to happiness are religiousness, gratitude, hope, zest, and curiosity; those most associated with the *engagement* route to happiness are zest, curiosity, hope, perseverance, and perspective; and those most associated with the *pleasure* route to happiness are humor, zest, hope, social intelligence, and love” (Peterson et al., 2007).

While not focusing exclusively on founders or their overall life satisfaction, there is also relevant research connecting job satisfaction and employees. “Peterson, Stephens, Park, Lee, and Seligman (2010) found that zest, hope, curiosity, gratitude, and spirituality are the strengths that best predict job satisfaction across diverse occupations. In a study of adult employees from

various occupations, Smith (2011) found that the strengths of zest, hope, and social intelligence are most highly associated with job satisfaction” (Littman-Ovadia and Lavy, 2016).

Personality Traits & Achievement

The most prominent research connecting achievement and personality traits is Angela Duckworth’s research on grit. “Achieving challenging goals entails not only talent but also the sustained and focused application of talent over time. Perseverance, or grit, according to Duckworth et al. (2007) is a personal quality shared by the most prominent leaders in every field” (Littman-OVadia & Lavy, 2016). Perseverance is especially relevant to the long-term dedication required to achieve the social change social entrepreneurs desire. Grit, more so than intelligence, luck, or any other factor, is most correlated to success.

Big-Five personality traits, considered by many to be the most scientifically sound understanding of personality, has shown “extraversion (the extent to which an individual is outgoing, energetic, joyful, and assertive) was linked to work performance only in jobs requiring interpersonal interaction, such as managerial positions (Judge, Bono, Ilies, & Gerhardt, 2002), and openness to experience (the extent to which an individual is imaginative and unconventional) was linked to career success only for jobs demanding creativity” (Littman-Ovadia and Lavy, 2016).

Character Strengths and Achievement

A variety of studies used character strengths to predict the GPA of college students. This includes “perseverance, fairness, gratitude, honesty, hope, and perspective” (Park & Peterson, 2008) or “perseverance, love of learning, humor, fairness, and kindness” (Lounsbury et al., 2009).

The most relevant research to my study is focused on associating character strengths and work performance. Perseverance has been shown to be the trait most consistently correlated. A study of 686 working individuals on the correlation between character strengths and work performance indicates that perseverance, honesty, hope, zest, and social intelligence were the signature strengths as those with the greatest correlation, in that order. However, 18 of the 24 character strengths were highly significantly correlated with work performance ($p < .001$). Using a stepwise regression involving 7 steps, perseverance ($Beta = .23$) was the only factor to clear $p < .001$, with social intelligence ($Beta = .09$, $p < .01$), love of learning ($Beta = .11$, $p < .01$), honesty ($Beta = .11$, $p < .05$), and prudence ($Beta = .09$, $p < .05$) scoring highest. Humility ($Beta = -.12$, $p < .01$) and spirituality ($Beta = -.08$, $p < .05$) scored lowest. (Littman-Ovadia & Lavy, 2016).

Traits of Relevant Subgroups

Character strengths have been used to study aspects of subgroups of the larger population. For example, “character strength predictors of satisfaction in college were hope, social intelligence, self-regulation, and fairness (Lounsbury et al., 2009)”.

The character strengths of teachers or military leaders and the traits of profit-driven entrepreneurs provide relevant background information on the traits of innovative or impactful leaders. In a study on the personality traits of successful small business owners, goal-setting, social networking, emotional resilience, and work drive were the top four traits most highly correlated with business growth (Owens, 2013).

“Peterson and Park (2006) briefly reported associations between teachers’ social intelligence and their students’ performance, and Lim and Kim (2014) found that restraint and interpersonal strengths predicted teachers’ personal teaching efficacy reports (whereas their intellectual and theological strengths did not)” (Littman-Ovadia and Lavy, 2016). In a

longitudinal study, effective teachers (judged by the gains of their students on standardized tests) scored highly in social intelligence, zest, and humor (Park & Peterson, 2009). In a study of military performance among West Point cadets, love was the most predictive character strength. (Peterson & Park, 2009)

Characteristics of Impactful Social Enterprises

While the character strengths of social entrepreneurs have not yet been studied, there is some research on the characteristics of social entrepreneurs as measured in other ways. Case studies on 7 large-scale, socially innovative organizations that transformed the lives of millions of people provided insights into the social entrepreneur who started the movement. The key trait that the most successful of these social entrepreneurs shared was an ability to work with and build bridges among very diverse stakeholders. The two initiatives whose leadership had less success in bridging diverse stakeholders had more difficulty in expanding the impacts of the initiatives. The successful leaders had either come from poor backgrounds but used education to build important relationships with influencers, or came from society's upper classes but spent their careers focused on building relationships with grassroots organizations. Regardless, they had the necessary experience to speak across diverse lines (Alvord et al, 2004).

33 Israeli social ventures founded in the 1990s were researched. "The study demonstrates eight variables as contributing to the success of the social ventures, arranged in the order of their value: (1) the entrepreneur's social network; (2) total dedication to the venture's success; (3) the capital base at the establishment stage; (4) the acceptance of the venture idea in the public discourse; (5) the composition of the venturing team, including the ratio of volunteers to salaried employees; (6) forming corporations in the public and nonprofit sectors in the long-term; (7) the ability of the service to stand the market test; and (8) the entrepreneurs' previous managerial

experience” (Sharir & Lerner, 2006). In order of 1-8, these factors might be loosely translated as the character strengths of social intelligence, perseverance, social intelligence, social intelligence, teamwork/leadership, teamwork, social intelligence, and leadership.

Applying Signature Strengths

Similar to how the *Diagnostic and Statistical Manual of Mental Disorders* serves as the baseline chronicle for all information regarding mental illness, *Character Strengths and Virtues: A Handbook and Classification* by Christopher Peterson and Martin Seligman serves as a guide to.. understanding how people use character strengths. Research on how character strengths are generally applied to drive performance, and how they could be specifically applied to drive social impact for social entrepreneurs, is discussed in *Interview Findings & Chapter 3*.

Lacuna

The wealth of literature around character strengths and their correlation to success within companies and organizations is growing. There is a growing interest and some research surrounding the characteristics of socially focused leaders like teachers or traditional entrepreneurs. However, the missing gap in this research is around the specific and niche job title of social entrepreneurs. By creating a study that is the first of its kind in studying the characteristics of impactful social entrepreneurs, the hope is that this research begins to fill that gap and create a great space for helping entrepreneurs achieve the important goal of applying their characteristics to further the social impact of their organization.

Chapter 2: Study of Characteristics of Social Entrepreneurs

Summary

75 social entrepreneurs participated in a survey that was based on their personal experience of the problem their organization seeks to solve and preexisting, scientifically sound surveys of character strengths, social impact, and life satisfaction. Results were assessed through quantitative analysis and qualitative research by interviewing study participants. Based on these interviews, survey analysis, and background research, recommendations were made for the best ways social entrepreneurs should apply character strengths. Key results include that kindness was positively and creativity was negatively correlated with social impact. Zest and humility were positively correlated with life satisfaction. Personal experience of the problem a social entrepreneur seeks to solve was negatively correlated with life satisfaction.

Introduction

Title: Characteristics of Impactful Social Entrepreneurs across Cultures

Principal Investigator: Matthew “Micky” Wolf, maw4237, Plan II Honors

On a national scale, personality traits such as grit – defined as perseverance and passion for long-term goals (Duckworth, 2007) – have risen to prominence as a scientifically sound predictor of future success. In a study on entrepreneurs, goal-setting, social networking, emotional resilience, and work drive were the top four traits most highly correlated with company growth (Owens, 2013). However, while this study and other similar ones have considered the correlation between the personal characteristics and the success of entrepreneurs, rarely have they studied the traits of social entrepreneurs (SEs).

Social entrepreneurs must have the skillset to create an efficient and sustainable business model while possessing the passion and deep understanding necessary for solving a social harm.

Some SEs are business experts solving a need in the market; others are seeking to solve a struggle they have personally faced since birth. These distinct psychological aspects of SEs beg the question: can positive psychology (PP) provide a lens to help determine the characteristics of the most impactful SEs?

Positive psychology and social entrepreneurship are fields that have only become formalized in the last twenty years. PP is a useful tool for studying SEs because of similarities in their core assumptions. They both rely on the scientific method and empirical evidence, especially compared to preceding efforts to address these topics. For hundreds of years, people have ascribed certain pursuits that make for a happy life; PP discovers the science behind what actually makes people happy. Similarly, social enterprises must meet market demands and generate sustainable income to drive impact and improve people's lives. This model leans toward creating efficiencies, rather than running like bureaucracies in government agencies or non-profits. Thus, social ventures are scientific in the way they operate to solve problems.

The purpose of this study is to determine the characteristics of impactful social entrepreneurs and how these character strengths can be applied to further social impact. I propose to assess the relationships between three personal characteristics of a social entrepreneur – their character strengths, personal experience of the problem their organization seeks to solve, and life satisfaction score – and the social impact of their organization.

Method

Participants

240 social entrepreneurs were invited via email to complete the study survey from early February to late March, 2018. 75 participated and in April and May of 2018 the data was analyzed and prepared for senior honors thesis publication. Participants were recruited through

personal networks at the University of Texas, in Austin, and through programs such as the Harvard Social Enterprise Conference and India's Jagriti Yatra. Most promotion and outreach was conducted through email.

The 75 participants were all social entrepreneurs from both the United States (39 participants) and India (34 participants, 2 marked other). Study measures were completed through an online Qualtrics survey and an optional follow-up interview. 33 participants completed the entire survey. 10 participants agreed to a follow up interview and 4 were interviewed.

A requirement for participants was that they be currently serving as "CEO/President/person leading the social enterprise." The survey defines a social enterprise "as an organization using primarily business means (i.e., revenue generating business models) to address primarily societal ends (i.e., goals related to society/the environment)." 4 participants said they "maybe" fit the definition because they relied on donations instead of revenue generating business models. Since their non-profits still utilize business means to achieve societal ends, they were included in the analysis.

This study, approved by the IRB as exempt because it presents minimal risk to participants. Data collected was not associated with identifying information unless participants opted-in for a follow-up interview.

Measures

Character strengths, personal experience of the problem they seek to solve, and satisfaction with life were the study's main measures for characteristics of social entrepreneurs. Social impact of the organization was usually the dependent variable (DV) and indicated whether the social entrepreneur was impactful. Life satisfaction was the DV for a few hypotheses.

Virtues & Character strengths. Character strengths are 24 durable, positive individual traits categorized into 6 virtues. The strengths are a key component of the field of positive psychology. The VIA Character Strengths Survey is scientifically verified and has been taken by over 1 million people worldwide. For example, the strength of humility is measured by questions such as “I rarely call attention to myself.” Ratings are recorded on a 5-point Likert-type scale ranging from 1 (not at all like me) to 5 (very much like me). The VIA-72 survey was created from the original VIA-IS by extracting the 3 most internally consistent questions for each of the 24 character strengths. Internal consistency reliability is .75 on average compared to .83 for the full length test, and initial validity coefficients range from .36 to .48. Internal consistencies of the 24 scales in the study range from an alpha of .60 for leadership to .87 for humor, perseverance, and spirituality. More information on the VIA Character Strengths Survey:

<https://www.viacharacter.org/www/VIA-72-More-Info>

Experience of the problem. Experience of the problem was defined by a yes or no answer on whether the entrepreneur has personally experienced the problem their organization is seeking to solve. Participants also indicated whether this experience/inexperience affected the business decisions they make. This was scored on a 5-point Likert-type scale ranging from 1 (definitely not) to 5 (definitely yes). Open ended questions were offered for participants to briefly explain their experience and how it does or does not affect their decision-making.

Life Satisfaction. Ed Diener’s Satisfaction with Life Scale is a scientifically verified survey to measure personal happiness. It asks 5 questions about life satisfaction on a 1 (Strongly Disagree) to 7 (Strongly Agree) scale. For example, one question is “In most ways, my life is close to ideal.” The total scores ranges from 5-35. A total score of 30-35 is highly satisfied, 20-

24 is average satisfaction, and 5-9 is highly dissatisfied. More information on Satisfaction with Life: <http://www.midss.org/content/satisfaction-life-scale-sw1>

Social Impact. The tool used to measure social impact was the Legatum Foundation's Social Impact Index (SII). Legatum Foundation created this index after considering dozens of factors that could have correlated with the social impact of 600+ projects that they had funded. After this extensive research, they identified and defined 5 categories that correlate with social impact to score the Social Impact Index: Breadth of Impact, Depth of Impact, Empowerment, Changing Paradigms, and Well-Being. Each category was scored on 1 (least socially impactful) to 5 (most socially impactful) scale. The total scores are then multiplied by 4 so that overall scores on SII range from 20-100. More information on Legatum Foundation's Social Impact Index: <http://www.legatum.org/sii>

Follow up Interview. At the end of the survey, participants were vasked to volunteer for an optional follow-up interview regarding their experiences as a social entrepreneur. The purpose of these 60 minute interviews were to understand the participant's entrepreneurial journey, how they apply their character strengths to their organization, how their personal experience of the problem affects decision-making, how their social enterprise affects their life satisfaction, and how they measure social impact. The questions are listed in *Appendix B*. Interviews were recorded as long as the participants provided consent (if not, notes were typed). Participants reserved the right to ask for any part of the conversation to not be recorded.

Hypotheses

Hypothesis 1: Courage will be the virtue most highly correlated with social impact

When considering the 6 virtues, courage, composed of the character strengths of bravery, honesty, zest, and perseverance, will be most highly associated with social impact. Zest and

perseverance are predicted to be among the 5 character strengths most correlated with social impact, and will be key to raising the score of this virtue.

Hypothesis 2: Character strengths of perseverance, zest, social intelligence, hope, and curiosity will be most correlated with social impact

One of the most consistent results in background research was that perseverance is correlated with success and achievement. This has been proven across diverse groups of participants and is aligned with Angela Duckworth's highly cited research on grit. The Big-Five personality paradigm is the most widely replicated and utilized construct in the field. The "highest association between any character strength and a Big-Five personality dimension has been found between perseverance and conscientiousness ($r = .66$; Littman-Ovadia & Lavy, 2012), suggesting that perseverance may also be highly associated with the quality of work performance" (Littman-Ovadia and Lavy, 2016). Zest, hope, and social intelligence are the strengths most highly associated with job satisfaction (Smith, 2011). A recent correlational study indicated that perseverance, honesty, hope, zest, and social intelligence, in that order, were the strengths most correlated with work performance (Littman-Ovadia and Lavy, 2016).

Social entrepreneurs must bring contagious energy to difficult and distressing work (zest), understand people and the societal problem they seek to solve on a deep level (social intelligence), believe in their ability to succeed (hope), and find novel ways of solving the problem with a sustainable revenue model (curiosity).

Hypothesis 3: Character strengths of prudence and humility will be negatively correlated with social impact

Social entrepreneurs must be more willing than most to accept a life fraught with career risk, lower salaries, and potential failure. This indicates that prudence will not be among their top strengths and those who score highly in prudence will likely not be social entrepreneurs. Social entrepreneurs also must be confident and headstrong enough to pursue an idea not yet in existence, and then be willing to relentlessly promote that idea to others. Humble people may struggle to think their idea is so much better than anyone else's that it is worth creating a whole organization to make that idea a reality. While humble confidence exists, I believe that those who strongly endorse humility will be less successful than most social entrepreneurs.

Hypothesis 4: Higher life satisfaction score will correlate with higher social impact

Positive psychology research by Shawn Achor and many others in the field states that happier people perform better in their careers, find greater success in pursuit of their goals, and are more likely to believe in their abilities to accomplish what other people deem a difficult task. I believe this translates to social impact. Furthermore, many social entrepreneurs are very invested in their work. If their work is successful, they will most likely be happier.

Hypothesis 5: Virtues of humanity and transcendence will correlate with higher life satisfaction

Substantial evidence indicates that the biggest determinant of life satisfaction is social relationships. Thus, humanity, with strengths of social intelligence, love, and kindness, seems to be most related to social relationships and should score highest. Transcendence, composed of strengths including humor, hope, gratitude, spirituality, and appreciation of beauty and excellence, provides laughter, joy, and meaning into one's life.

Hypothesis 6: Character strengths of zest, hope, and curiosity will correlate with higher life satisfaction

Seligman discusses three pathways to happiness: meaning, engagement, and pleasure. Consistently, meaning and engagement are greater indicators of life satisfaction. “Character strengths most associated with the meaning route to happiness are spirituality, gratitude, hope, zest, and curiosity; those most associated with the engagement route to happiness are zest, curiosity, hope, perseverance, and perspective” (Peterson et al., 2007). Based on the overlap of zest, hope, and curiosity, I believe they will correlate with higher life satisfaction.

Hypothesis 7: SEs with personal experience of the problem they seek to solve will be more socially impactful

For SEs, one of, if not the most important factor in running an enterprise is deeply understanding the problem they seek to solve. That problem also needs to be one that is a real pain point for real people. If the social entrepreneur has personally experienced the pain, there is a strong chance that pain exists for others. Personal and potentially familial motivation to right this societal wrong, along with the lived experience of truly understanding how a problem affects one’s life, will make those with personal experience more successful in driving social impact. For struggling or controversial organizations, it also separates those truly working for the organization’s cause as opposed to those working to build social capital among peers.

Hypothesis 8: For SEs with experience of the problem they seek to solve, character strengths of judgment, perspective, and self-regulation will be more correlated with social impact compared to those with no experience of the problem

This hypothesis reflects the ability of an SE with personal experience to not allow themselves to be biased toward their own experience of the problem. It requires the ability to detach themselves from their experience and focus on the market opportunity and making the best, most data-driven decisions for the organization's future.

Hypothesis 9: For SEs without personal experience of the problem, character strengths of perseverance, creativity, and curiosity will be correlated with social impact compared to those with experience of the problem

These characteristics help replace the obsession with a problem that a successful social enterprise requires and those with a personal experience already bring to the table. Passion is key to ensuring a willingness to constantly attack a problem, persist in troubled times, and not give up. I believe these traits help replace the natural drive to solve the issue that those with personal experience already possess.

Analytic Approach

Both quantitative and qualitative data analyses were conducted. Analyses of survey data were conducted in either Microsoft Excel or the statistics analytics tool, R. It included descriptive statistics, linear regressions to test for significance, t-tests, correlation tests, and best-subset selection function. We qualitatively examined the 4 follow-up interviews, quantitative survey results, and background research to critically discuss results and create recommendations for how social entrepreneurs should apply character strengths.

Descriptive statistics, including mean scores and standard deviations, were computed for the overall participant sample and separately for the two groups of those with and without a personal experience of the problem.

To test hypotheses, five separate analyses, referred to as *Test 1*, *Test 2*, *Test 3*, *Test 4*, and *Test 5* were run. *Tests 1-3* were used to analyze Hypotheses 1-6 while *Test 1* and 3-5 were used to analyze Hypotheses 7-9.

Test 1

Test 1 tests for correlation, which shows the one-to-one relationship between one independent variable (IV) and the dependent variable (DV). The DV was usually social impact or life satisfaction. However, *Test 1* tests an individual relationship because it does not account for the effects that the many other variables may have on results.

Test 2

Test 2 used a linear regression that controls for all relevant variables. It was used to adequately control for the other variables, usually the other 5 virtues or 23 character strengths, that may impact correlation. This was the next logical step after *Test 1* because it tests the relationship via the regression p-value. *Test 2* explains whether the independent and dependent variable relationship is controlling for the other independent control variables. However, some findings could be significant by chance alone given the large number of analyses conducted. Thus, *Test 3* was needed.

Test 3

Test 3 identifies the best-fit IVs so that a more predictive model can be created; one that eliminates insignificant variables. By running a “best subset” selection function, all potential combinations of variables from *Test 2* are tested to see which subset of variables will create the regression that best fits the data. The model is selected through an exhaustive search that can consider models such as forward or backward stepwise regression, or sequential replacement. The model with the lowest Bayesian Information Criterion (BIC), a statistical criterion for model selection amongst a finite set of models, is chosen. The best-fit variables selected by this model are the best combination of model fit while avoiding overfit and are likely to be found as significant. It was unlikely that the best-fit model includes all 24 character strength variables or all 6 virtue variables. In *Test 3*, a linear regression was then run with the best-fit variables and results in significance (p-value) and direction (positive or negative t-value) for every best-fit variable. *Test 3* therefore provides the clearest depiction of overall findings by analyzing the contribution of each variable to the outcome while controlling the influence of all other variables.

The results from *Test 1*, *Test 2*, and *Test 3* do not result in the same p-value because they are controlling for different amount of independent variables. *Test 1*, correlation analysis, only tests a relationship between the DV and a single IV. The linear regression of *Test 2* tests all variables and thus when it analyzes a single IV it must also control for every other variable in the model. Comparatively, *Test 3* selects a model that identifies a subset of the best-fit variables from the whole group of variables tested in *Test 2*. These best-fit variables are run in a linear regression that controls only for the other best-fit variables, instead of considering many

insignificant variables like *Test 2*. Significance in one of the three tests' p-values does not necessitate significance in the other tests.

Test 4

Test 4 was a t-test resulting in significance (p-value) in comparing the mean score between two independent groups. *Test 4* was used to compare participants with and without personal experience of the problem they seek to solve.

Test 5

Test 5 determines whether significant correlation between a DV and IV is dependent upon a distinct IV. This analysis was conducted with a linear regression testing the interaction between personal experience and a virtue or character strength as the IV with the DV. It answers whether correlation between social impact or life satisfaction and a virtue or character strength dependent upon personal experience. For the regressions showing a significant interaction, 2 linear regressions were run, each using the different group of personal experience as its data set. In those cases, one group (those with or without personal experience) would likely be significant.

Results

Descriptive Statistics

Means and standard deviations for the study's main measures are included in **Table 1**. The mean and standard deviation were calculated based on the 1-5 scale used to score each question response. For all virtue scores, it was $M= 4.055$, $SD= 0.501$, for all character strength scores it was $M= 4.045$, $SD= 0.676$, for Satisfaction with Life Scale it was $M= 24.089$, $SD= 5.712$, and for Social Impact Index it was $M= 62.930$, $SD= 15.930$. The highest mean of a virtue

is humanity at $M= 4.185$, $SD= 0.461$ and the lowest is temperance at $M= 3.699$, $SD= 0.425$. The highest mean of a character strength is honesty at $M= 4.374$, $SD= 0.582$ and the lowest is self-regulation at $M= 3.364$, $SD= 0.742$. The mean and standard deviation for the ranked order of virtues (1-6) and character strengths (1-24) are shown in **Table 2**. Only the raw scores, not the ranked order, are used to analyze data moving forward.

Means and standard deviations for the study's main measures are included in **Table 3** and considered by grouping the participants based on those with and without personal experience of the problem. The mean and standard deviation for all virtue scores is $M= 4.078$, $SD= 0.504$ for those with personal experience and $M= 4.011$, $SD= 0.468$ for those without. For all character strength scores, it is $M= 4.070$, $SD= 0.665$ for those with personal experience and $M= 3.995$, $SD= 0.697$ for those without. For Satisfaction with Life Scale it is $M= 22.250$, $SD= 6.790$ for those with personal experience and $M= 26.250$, $SD= 4.181$ for those without. For Social Impact Index, it is $M= 64.174$, $SD= 16.022$ for those with personal experience and $M= 62.000$, $SD= 17.848$ for those without.

Table 1: Descriptive Statistics for Virtues, Character Strengths, Life Satisfaction & Social Impact

Virtue & Character Strength	Mean Score	Standard Deviation
All Virtues	4.055	0.501
All Character Strengths	4.045	0.676
Humanity	4.185	0.461
Kindness	4.242	0.62

Love	4.182	0.641
Social Intelligence	4.131	0.552
Courage	4.172	0.476
Honesty	4.374	0.582
Bravery	4.222	0.569
Perseverance	4.051	0.619
Zest	4.04	0.686
Justice	4.168	0.46
Fairness	4.293	0.558
Leadership	4.152	0.56
Teamwork	4.061	0.482
Wisdom	4.115	0.462
Creativity	4.232	0.643
Curiosity	4.232	0.517
Perspective	4.202	0.552
Judgment	4.141	0.534
Love of Learning	3.768	0.705
Transcendence	3.992	0.512
Hope	4.242	0.516

Gratitude	4.121	0.57
Humor	4.091	0.774
Appreciation of Beauty & Excellence	3.929	0.691
Spirituality	3.576	1.035
Temperance	3.699	0.425
Forgiveness	3.97	0.6256
Humility	3.758	0.7182
Prudence	3.707	0.6496
Self-Regulation	3.364	0.7424
Life Satisfaction	Mean Score	Standard Deviation
Life Satisfaction Total	24.089	5.712
LS Q1	5.036	1.537
LS Q2	4.875	1.641
LS Q3	4.857	1.482
LS Q4	5.107	1.614
LS Q5	4.214	1.914
Social Impact	Mean Score	Standard Deviation
Social Impact Index	62.930	15.930

Total Direct Beneficiaries per year	298,974	1,664,475
Total Actual Expenditure per year	\$4,274,999	\$14,176,692
Cost Per Life	\$2,301.07	\$8,784.88

Table 2: Virtue & Character Strengths Rank: Mean & Standard Deviation

Virtue & Character Strength	Mean Rank	Standard Deviation
Humanity	2.545	1.563
Courage	2.788	1.409
Justice	2.97	1.895
Wisdom	3.333	1.429
Transcendence	3.818	1.648
Temperance	5.03	1.287
Bravery	7.758	5.624
Fairness	8.061	5.701
Honesty	8.242	5.793
Creativity	8.333	6.9
Love	8.97	7.38
Curiosity	9.394	5.448
Teamwork	10.818	5.934
Hope	10.97	5.145
Appreciation of Beauty & Excellence	11.03	7.614
Kindness	11.091	6.227
Gratitude	11.515	5.837
Humor	11.818	6.957
Judgment	12.273	5.675
Leadership	12.576	5.766
Forgiveness	12.606	6.787
Perseverance	13.424	6.615
Perspective	13.424	5.783
Social Intelligence	14.333	5.759
Prudence	14.455	6.769
Zest	15.697	5.61
Love of Learning	16.606	5.879
Humility	17.545	6.652
Spirituality	18.212	6.48
Self-Regulation	20.848	3.563

Table 3: Descriptive Statistics for Virtues, Character Strengths, Life Satisfaction & Social Impact by Personal Experience

Virtue & Character Strength	Mean PE	Mean NPE	Stand. Dev. PE	Stand. Dev. NPE
All Virtues	4.078	4.011	0.504	0.468
All Character Strengths	4.070	3.995	0.665	0.697
Humanity	4.227	4.101	0.507	0.360
Kindness	4.242	4.212	0.62	0.563
Love	4.182	4	0.641	0.494
Social Intelligence	4.131	4.091	0.552	0.560
Courage	4.223	4.068	0.474	0.487
Honesty	4.374	4.303	0.582	0.433
Bravery	4.222	4	0.569	0.558
Perseverance	4.051	4.061	0.619	0.757
Zest	4.04	3.909	0.686	0.776
Justice	4.136	4.232	0.476	0.440
Fairness	4.293	4.515	0.558	0.480

Leadership	4.152	4.152	0.56	0.603
Teamwork	4.061	4.03	0.482	0.433
Wisdom	4.136	4.073	0.488	0.423
Creativity	4.232	4.091	0.643	0.634
Curiosity	4.232	4.03	0.517	0.505
Perspective	4.202	4.242	0.552	0.368
Judgment	4.141	4.061	0.534	0.443
Love of Learning	3.768	3.939	0.705	0.757
Transcendence	4.045	3.885	0.507	0.529
Hope	4.242	4.303	0.516	0.458
Gratitude	4.121	4.212	0.57	0.522
Humor	4.091	4	0.774	0.955
Appreciation of Beauty & Excellence	3.929	3.788	0.691	0.601
Spirituality	3.576	3.121	1.035	1.176
Temperance	3.697	3.705	0.416	0.463
Forgiveness	3.97	3.97	0.626	0.640
Humility	3.758	4	0.718	0.760
Prudence	3.707	3.727	0.65	0.534
Self-Regulation	3.364	3.121	0.742	0.958

Life Satisfaction	Mean PE	Mean NPE	Stand. Dev. PE	Stand. Dev. NPE
Life Satisfaction Total	22.250	26.250	6.790	4.181
LFS1	4.667	5.667	1.711	0.888
LFS2	4.667	5.417	1.834	1.084
LFS4	4.667	5.417	2.036	1.240
LFS3	4.500	5.083	1.694	1.311
LFS5	3.750	4.667	1.984	1.969
Social Impact	Mean PE	Mean NPE	Stand. Dev. PE	Stand. Dev. NPE
Social Impact Index	64.174	62.000	16.022	17.848
Total Direct Beneficiaries per year	577,190	4,868	2,352,670	11,262
Total Actual Expenditure per year	\$4,292,599.86	\$6,318,071.88	\$17,139,730.74	\$12,771,417.47
Cost Per Life	\$3,058.87	\$1,499.66	\$12,341.16	\$2,413.63

Hypothesis Testing

Hypothesis 1: Courage will be the virtue most highly correlated with social impact

The analysis of virtues **did not support** this hypothesis.

Test 1: Courage ($p = 0.630$, $r = 0.01$) was not significantly correlated with social impact.

As **Table 3** shows, no virtues were found to be significant when individual correlations between each virtue and the social impact index are analyzed.

Table 3: Correlation of Virtues & Social Impact

Virtue	P-Value	Correlation Coefficient
Humanity	0.098	0.29
Courage	0.630	0.01
Justice	0.780	0.05
Wisdom	0.476	-0.13
Transcendence	0.709	0.07
Temperance	0.699	-0.07

Test 2: When all 6 virtues are analyzed in one linear regression, only **humanity** ($t = 2.495$, $p = 0.0193$) is positively and significantly correlated. **Table 4** shows this analysis.

Table 4: Linear Regression Analyses of Virtues Predicting Social Impact

Virtue	T-Value	P-Value
Humanity	2.495	0.0193 *
Courage	-0.488	0.630
Justice	0.159	0.875

Wisdom	-1.488	0.149
Transcendence	0.369	0.715
Temperance	-0.192	0.849

Test 3: Using the 6 virtues as variables, a best-fit subset function was run. At a BIC of .61, it shows that **humanity** ($p= 0.00387$, $t= 3.131$) is **significantly and positively** correlated with social impact while **wisdom** ($p= 0.01290$, $t= -2.644$) is **significantly and negatively** correlated with social impact. The results of the linear regression, humanity when controlling for wisdom, and wisdom when controlling for humanity, are shown in **Table 5**. No other virtues are significant predictors.

Table 5: Best-Fit Virtues with Social Impact

Virtue	T-Value	P-Value
Humanity	3.131	0.00387 **
Wisdom	-2.644	0.01290 *

Hypothesis 2: Character strengths of perseverance, zest, social intelligence, hope, and curiosity will be most correlated with social impact

The analysis of character strengths **did not support** this hypothesis.

Test 1: When correlation is analyzed, the only significant result is **kindness** ($p= 0.299$, $r= 0.38$). Social Intelligence ($p= 0.860$, $r= 0.03$), hope ($p= 0.737$, $r= -0.06$), zest ($p= 0.893$, $r= 0.02$), curiosity ($p= 0.968$, $r= 0.01$), and perseverance ($p= 0.410$, $r= -0.15$) were not significant.

Table 6: Correlation of Character Strengths & Social Impact

Character Strength	P-Value	Correlation Coefficient
Kindness	0.0299 *	0.38 *
Love	0.179	0.24
Social Intelligence	0.860	0.03
Honesty	0.403	0.15
Bravery	0.987	0
Perseverance	0.410	-0.15
Zest	0.893	0.02
Fairness	0.888	-0.03
Leadership	0.995	0
Teamwork	0.336	0.17
Creativity	0.230	-0.21
Curiosity	0.968	0.01
Perspective	0.229	-0.22
Judgment	0.898	-0.02

Love of Learning	0.804	-0.04
Hope	0.737	-0.06
Gratitude	0.662	0.08
Humor	0.646	0.08
Appreciation of Beauty & Excellence	0.557	0.11
Spirituality	0.907	0.02
Forgiveness	0.745	0.06
Humility	0.427	-0.14
Prudence	0.708	-0.07
Self-Regulation	0.947	-0.01

Test 2: When all 24 character strengths were analyzed together in one linear regression, none were significant. **Table 7** shows this analysis.

Table 7: Linear Regression Analyses of Character Strengths Predicting Social Impact

Character Strength	T-Value	P-Value
Kindness	-0.661	0.527
Love	0.863	0.413
Social Intelligence	0.294	0.776
Honesty	1.136	0.289

Bravery	0.937	0.376
Perseverance	-1.616	0.145
Zest	0.826	0.433
Fairness	-0.220	0.831
Leadership	0.225	0.827
Teamwork	0.353	0.733
Creativity	-1.481	0.177
Curiosity	1.070	0.316
Perspective	-1.108	0.300
Judgment	0.590	0.571
Love of Learning	-0.537	0.606
Hope	-0.787	0.454
Gratitude	0.919	0.385
Humor	-0.260	0.802
Appreciation of Beauty & Excellence	0.873	0.408
Spirituality	-0.009	0.993
Forgiveness	0.126	0.903
Humility	1.188	0.269
Prudence	-0.803	0.445

Self-Regulation	-0.122	0.906
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Test 3: Using the 24 character strengths as predictors, the best subset model, provided at a BIC of -.56, shows that **kindness** ($p= 0.00357$, $t= 3.162$) is **significantly and positively** correlated with social impact while **creativity** ($p= 0.02106$, $t= -2.435$) is **significantly and negatively** correlated with social impact. No other character strengths are significant predictors. The results of the linear regression that analyzed significant character strengths is in **Table 8**.

Table 8: Best-Fit Character Strengths for Social Impact

Character Strength	T-Value	P-Value
Kindness	3.162	0.00357 **
Creativity	-2.435	0.02106 *

Hypothesis 3: Character strengths of prudence and humility will be negatively correlated with social impact

The analysis of character strengths **did not support** this hypothesis.

Test 1: According to **Table 6** analysis, no strength is significantly and negatively correlated with social impact. However, humility ($r= -0.14$), perspective ($r= -0.22$), creativity ($r= -0.21$), and perseverance ($r= -0.15$) all showed a non-significant negative relationship with social impact at a r of -0.10 or higher. Prudence ($r= -0.07$) also shows a slightly negative, non-significant relationship with social impact.

Test 2: When all 24 character strengths were analyzed together in one linear regression, none were significant. **Table 7** shows this analysis.

Test 3: The best model analysis in **Table 8** showed that **creativity ($p= 0.02106$, $t= -2.435$) is negatively and significantly correlated** with social impact.

Hypothesis 4: Higher life satisfaction score will correlate with higher social impact

The analysis of the satisfaction with life scale **did not support** this hypothesis.

Test 1: The correlation test, at **p-value= 0.482, $r= 0.11$ showed no significant correlation**. **Table 9** shows analysis.

Table 9: Correlation of Life Satisfaction & Social Impact

Life Satisfaction	P-Value	Correlation Coefficient
Life Satisfaction Total	0.4815	0.11
LS Q4	0.1107	0.25
LS Q1	0.2226	0.19
LS Q2	0.8635	-0.03
LS Q3	0.6338	-0.08
LS Q5	0.8029	0.04

Test 2: Since there is only one independent variable, when analyzed on a linear regression the significance level is the same as *Test 1* at a p-value= 0.482.

Test 3: The best model analysis indicated that Satisfaction with Life Scale Question 4, shown in **Appendix C** as “So far I have gotten the most important things I want in life”, was the best-fit variable for the data. However, at a BIC of 4.7, there was a good chance Q4 was not significant. When the linear regression was run with just Question 4, it was not indicated as significant ($p=0.111$).

Hypothesis 5: Virtues of humanity and transcendence will correlate with higher life satisfaction

The analysis of virtues and life satisfaction **did not support** this hypothesis.

Test 1: As shown in **Table 10**, humanity ($p=0.873$, $r=0.03$) and transcendence ($p=0.900$, $r=0.02$) are not correlated with higher life satisfaction.

Table 10: Correlation of Virtues & Life Satisfaction

Virtue	P-Value	Correlation Coefficient
Humanity	0.873	0.03
Courage	0.639	0.08
Justice	0.790	0.05
Wisdom	0.735	0.06
Transcendence	0.900	0.02
Temperance	0.241	0.21

Test 2: With all 6 virtues in one linear regression, none were significant. **Table 11** shows analysis.

Table 11: Linear Regression Analyses of Virtues Predicting Life Satisfaction

Virtue	T-Value	P-Value
Humanity	-0.006	0.995
Courage	0.518	0.609
Justice	-0.341	0.736
Wisdom	-0.400	0.693
Transcendence	-0.776	0.445
Temperance	1.393	0.175

Test 3: The best models analysis indicates temperance is the best-fit variable for life satisfaction. However, similar to hypothesis 4, the BIC of 5.5 is quite high. When linear regression was run, temperance ($t = 1.197$, $p = 0.241$) was not shown to be significant.

Hypothesis 6: Character strengths of zest, hope, and curiosity will correlate with higher life satisfaction

This hypothesis was **partially supported by evidence**. In *Test 3*, zest was a positive and significant predictor with life satisfaction.

Test 1: In the correlation analysis, no character strength shows significant correlation including zest ($p = 0.438$, $r = 0.14$), hope ($p = 0.887$, $r = 0.03$), or curiosity ($p = 0.814$, $r = -0.04$). Results analyzed in **Table 12**.

Table 12: Correlation of Character Strengths & Life Satisfaction

Character Strength	P-Value	Correlation Coefficient
Kindness	0.683	0.07
Love	0.915	0.02
Social Intelligence	0.856	-0.03
Honesty	0.805	0.04
Bravery	0.372	-0.16
Perseverance	0.236	0.21
Zest	0.438	0.14
Fairness	0.949	0.01
Leadership	0.768	0
Teamwork	0.730	0.06
Creativity	0.774	-0.05
Curiosity	0.814	-0.04
Perspective	0.472	0.13
Judgment	0.925	0.02
Love of Learning	0.359	0.17
Hope	0.887	0.03
Gratitude	0.693	0.07

Humor	0.800	0.05
Appreciation of Beauty & Excellence	0.169	-0.25
Spirituality	0.458	0.13
Forgiveness	0.187	0.24
Humility	0.340	0.17
Prudence	0.698	0.07
Self-Regulation	0.760	0.06

Test 2: In the regression testing significance, no character strength shows significant correlation including zest ($p = 0.252$, $t = 1.234$), hope ($p = 0.419$, $t = 0.853$), or curiosity ($p = 1.507$, $r = 0.17$). Results analyzed in **Table 13**.

Table 13: Linear Regression Analyses of Character Strengths Predicting Life Satisfaction

Character Strength	T-Value	P-Value
Kindness	0.363	0.726
Love	-0.896	0.396
Social Intelligence	0.093	0.928
Honesty	0.351	0.735
Bravery	0.467	0.653
Perseverance	0.928	0.38

Zest	1.234	0.252
Fairness	-0.946	0.372
Leadership	0.405	0.696
Teamwork	0.39	0.707
Creativity	-1.008	0.343
Curiosity	-1.507	0.17
Perspective	0.234	0.821
Judgment	-0.377	0.716
Love of Learning	1.091	0.307
Hope	0.853	0.419
Gratitude	0.154	0.882
Humor	0.32	0.757
Appreciation of Beauty & Excellence	-2.063	0.073
Spirituality	1.529	0.165
Forgiveness	-0.17	0.869
Humility	-0.064	0.951
Prudence	0.289	0.78
Self-Regulation	-1.315	0.225

Test 3: The character strength of zest ($p = 0.0490$, $t = 2.055$) was shown to be significantly and positively correlated with life satisfaction in the best models analysis. With a BIC of 3.5, the regression also indicates humility ($p = 0.0394$, $t = 2.157$) as significantly and positively correlated with life satisfaction. Creativity ($p = 0.0403$, $t = -2.147$) is significantly and negatively correlated with life satisfaction. Results analyzed in **Table 14**.

Table 14: Best-Fit Character Strength & Life Satisfaction

Character Strength	T-Value	P-Value
Creativity	-2.147	0.0403 *
Zest	2.055	0.0490 *
Humility	2.157	0.0394 *

Hypothesis 7: SEs with personal experience of the problem they seek to solve will be more socially impactful

The analysis **did not support** this hypothesis.

Test 4: The t-test explored whether those with and without personal experience differed significantly in their social impact score. The test resulted in a $p\text{-value} = 0.577$ and $t\text{-value} = 0.562$, indicating the two groups did not differ significantly in social impact. **Table 15** provides analysis comparing those with and without personal experience.

Table 15: Personal Experience Effect on Social Impact

Measure	Social Impact Index
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Mean PE	64.174
Mean NPE	62
Standard Deviation PE	16.022
Standard Deviation NPE	17.848
T-Value	0.562
P-Value	0.577
R-Value PE	0.09
R-Value NPE	-0.04

Hypothesis 8: For SEs with experience of the problem they seek to solve, character strengths of judgment, perspective, and self-regulation will be more correlated with social impact compared to those with no experience of the problem

Hypothesis 9: For SEs without personal experience of the problem, character strengths of perseverance, creativity, and curiosity will be correlated with social impact compared to those with experience of the problem

The analysis **did not support** these hypotheses.

Test 1: When analyzing separately the correlation of each group, those with or without personal experience, only **kindness ($p= 0.033$ $r= 0.64$) for those without personal experience has a significant and positive** correlation to social impact. Humility and forgiveness are approaching significant and negative correlation for those with and without personal experience,

respectively. Results can be found in **Table 16**. However, this analysis does not provide a direct comparison between the two groups.

Table 16: Correlation of Character Strengths & Social Impact by Personal Experience Groups

Character Strength	P-Val PE	P-Val NPE	Correlation Coefficient PE	Correlation Coefficient NPE
Kindness	0.241	0.033 *	0.26	.64*
Love	0.129	0.931	0.33	0.03
Social Intelligence	0.860	0.628	-0.04	0.16
Zest	0.587	0.707	0.12	-0.13
Honesty	0.404	0.850	0.19	0.06
Bravery	0.776	0.699	0.06	-0.13
Perseverance	0.364	0.829	-0.2	-0.07
Fairness	0.887	0.656	0.03	-0.15
Leadership	0.688	0.644	-0.09	0.16
Teamwork	0.767	0.210	0.07	0.41
Curiosity	0.676	0.572	-0.09	0.19
Creativity	0.125	0.985	-0.34	0.01
Judgment	0.847	0.947	-0.04	0.02
Perspective	0.106	0.578	-0.35	0.19

Love of Learning	0.977	0.704	0.01	-0.13
Hope	0.901	0.441	0.03	-0.26
Gratitude	0.914	0.554	0.02	0.2
Humor	0.717	0.804	0.08	0.08
Appreciation of Beauty & Excellence	0.322	0.660	0.22	-0.15
Spirituality	0.679	0.808	0.09	-0.08
Humility	0.05893 .	0.387	-0.41	0.29
Forgiveness	0.323	0.06606 .	-0.22	0.57
Self-Regulation	0.337	0.407	0.21	-0.28
Prudence	0.869	0.667	-0.04	-0.15

Test 3: When testing the interaction of personal experience, the best model analysis, at a BIC of -11, provided quite a few character strengths for the best-fit model including zest, appreciation of beauty & excellence, love, and perspective. Of these factors, only the interaction of perspective and personal experience ($t = -2.319$, $p = 0.0301$) indicated significance. When tests were run within the two groups separated based on personal experience, perspective actually had a negative correlation with social impact that is approaching significance, though not quite there, for those with personal experience. **Table 17** shows this analysis.

Table 17: Significance of Perspective by Personal Experience Group

Character Strength	T-Value PE	T-Value NPE	P-Value PE	P-Value NPE
Perspective	-1.691	0.577	0.106367	0.578

Test 4: T-tests found there were no significant differences between the two groups on any of the strengths. Results in **Table 18**. However, this test does not show correlation to social impact.

Table 18: Significant Difference in Character Strengths between Personal Experience Groups

Character Strength	Mean PE	Mean NPE	Stand. Dev. PE	Stand. Dev. NPE	P-Val
Perseverance	4.051	4.061	0.619	0.757	0.954
Zest	4.04	3.909	0.686	0.776	0.478
Kindness	4.242	4.212	0.62	0.563	0.838
Love	4.182	4	0.641	0.494	0.205
Social Intelligence	4.131	4.091	0.552	0.560	0.773
Bravery	4.222	4	0.569	0.558	0.121
Honesty	4.374	4.303	0.582	0.433	0.582
Creativity	4.232	4.091	0.643	0.634	0.379

Teamwork	4.061	4.03	0.482	0.433	0.792
Fairness	4.293	4.515	0.558	0.480	0.091
Leadership	4.152	4.152	0.56	0.603	1.000
Perspective	4.202	4.242	0.552	0.368	0.731
Curiosity	4.232	4.03	0.517	0.505	0.119
Love of Learning	3.768	3.939	0.705	0.757	0.353
Judgment	4.141	4.061	0.534	0.443	0.511
Hope	4.242	4.303	0.516	0.458	0.621
Gratitude	4.121	4.212	0.57	0.522	0.508
Humor	4.091	4	0.774	0.955	0.679
Appreciation of Beauty & Excellence	3.929	3.788	0.691	0.601	0.385
Spirituality	3.576	3.121	1.035	1.176	0.110
Humility	3.758	4	0.718	0.760	0.197
Forgiveness	3.97	3.97	0.626	0.640	1.000
Self-Regulation	3.364	3.121	0.742	0.958	0.269
Prudence	3.707	3.727	0.65	0.534	0.892

Test 5: This test considered whether the interaction between personal experience and one character strength was significantly correlated with social impact. 24 regression tests, 1 for each strength, were run to see if the relationship between an independent character strength and social impact was dependent on personal experience. Results are in **Table 19**. Only **forgiveness** ($p = 0.0305$, $t = -2.274$) indicates a significant relationship while **humility** ($p = 0.060$, $t = -1.958$) showed potentially significant relationships.

Table 19: The Effect of Personal Experience on the Relationship between Character Strength and Social Impact

Character Strength	T-Value	P-Value
Kindness	-1.423	0.1654
Love	0.555	0.583
Social Intelligence	-0.549	0.587
Honesty	-0.138	0.891
Bravery	0.517	0.6089
Perseverance	-0.418	0.679
Zest	0.665	0.5115
Fairness	0.506	0.6164
Leadership	-0.654	0.519
Teamwork	-1.068	0.294
Creativity	-0.847	0.404

Curiosity	-0.759	0.454
Perspective	-1.197	0.241
Judgment	-0.153	0.88
Love of Learning	0.359	0.7222
Hope	0.816	0.421
Gratitude	-0.522	0.606
Humor	0.038	0.9698
Appreciation of Beauty & Excellence	0.913	0.3688
Spirituality	0.472	0.641
Forgiveness	-2.274	.030542 *
Humility	-1.958	.0600 .
Prudence	0.36	0.7214
Self-Regulation	1.334	0.1924

A linear regression analyzed the correlation between these character strengths and social impact among the 2 separate groups of participants, those with and without a personal experience of the problem they seek to solve. For individuals without a personal experience, forgiveness ($p=0.066$, $t=2.091$) is a positive predictor of social impact approaching significance while humility ($p=.387$, $t=0.909$) has no relationship with social impact. For individuals with a personal experience, humility is a negative predictor of social impact approaching significance ($p=$

0.0589, $t = -2.003$) while forgiveness has no relationship with social impact scores ($p = 0.323$, $t = -1.012$). These results are shown in **Table 20**.

Table 20: Relationship Between Character Strength and Social Impact Based on Personal Experience Group

Character Strength	T-Value PE	T-Value NPE	P-Value PE	P-Value NPE
Humility	-2.003	0.909	0.0589 .	0.387
Forgiveness	-1.012	2.091	.323	0.0661 .

Other Findings

Test 3 was run to test whether the best-fit variables for social impact with life satisfaction score, either virtue or character strengths, and dummy variables for personal experience, India vs. America, and for-profit vs. non-profit. The models indicated that the two initial character strengths, kindness and creativity, and virtues, humanity and wisdom, are still the most significant predictors for social impact.

As shown in **Table 21**, there is a significant and negative correlation between personal experience ($p = .0357$, $r = -.28$) and life satisfaction. The results indicate that those without a personal experience of the problem are happier than those with a personal experience.

Table 21: Personal Experience Effect on Life Satisfaction

Measure	Life Satisfaction
Mean PE	22.250

Mean NPE	26.250
Standard Deviation PE	6.790
Standard Deviation NPE	4.181
T-Value	-2.155
P-Value	0.0357 *
R-Value PE	-.28 *
R-Value NPE	0.200

Comparing the virtues between American and Indian social entrepreneur, there is no significant difference in neither their possession of the virtue nor their virtues correlation with social impact. These results are shown in **Table 22**.

Table 22: Virtues in India & America

Virtues	Mean India	Mean USA	P-Value	India Correlation Coefficient	USA Correlation Coefficient
Humanity	4.148	4.216	0.695	0.180	0.470
Courage	4.194	4.153	0.811	0.010	0.000
Justice	4.252	4.099	0.366	0.050	0.070
Wisdom	4.126	4.078	0.630	-0.160	-0.070
Transcendence	0.399	0.400	0.959	-0.010	0.110

Temperance	3.800	3.616	0.244	0.030	-0.140
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For 56 participants who responded, the UN Sustainable Development Goals with the largest focus were Quality Education (23), Reduced Inequalities (22), and Good Health and Well-Being (22). Life on Land (3) and Life Below Water (1), goals toward creating a more sustainable ecosystem, and Partnerships for the Goals (3) were quite low. Full results are described in **Table 23**.

Table 23: UN Sustainable Development Goals

UN Sustainable Development Goal	Organizations with Focus
Good Health & Well-Being	22
Affordable & Clean Energy	4
Sustainable Cities & Communities	18
No Poverty	13
Zero Hunger	11
Reduced Inequalities	22
Responsible Consumption & Production	10
Climate Action	7
Decent Work & Economic Growth	12
Peace, Justice, & Strong Institutions	12

Quality Education	23
Partnerships for the Goals	3
Gender Equality	14
Industry, Innovation, & Infrastructure	12
Life on Land	3
Life Below Water	1
Clean Water & Sanitation	4

Discussion

Overall, the only hypothesis supported by evidence was the correlation between zest and life satisfaction.

Kindness, and by extension its virtue category of humanity, was significantly and positively correlated with social impact. Creativity, and by extension its virtue category of wisdom, was significantly and negatively correlated with social impact.

Kindness has been shown in previous research to be the most the most commonly-endorsed character strength in the population at large and survey participants are a group of people dedicating themselves to bettering the world and the lives of other people. It is logical for kindness to be the most significant predictor of social impact.

Creativity's negative correlation with social impact is a bit more puzzling. A plausible explanation could be that social entrepreneurs who brainstorm creative plans might not have the operational abilities or grit to execute. They may not possess the self-regulation and singular focus needed to be as socially impactful as they hope in the difficult world of social change.

While creativity was negatively and significantly correlated with social impact, the correlational analysis found no significant relationship with prudence ($r = -0.07$) or humility ($r = -0.14$). Humility, perspective ($r = -0.22$), creativity ($r = -0.21$), and perseverance ($r = -0.15$) all trended negative at above $r = -0.10$. However, these results seem counterintuitive since perseverance is included. Perseverance is often the strength most associated with career success (Littman-Ovadia and Lavy, 2016). Furthermore, the difficulties of entrepreneurship and slow-moving nature of social change means that social entrepreneurs, in theory, would have scored highly in perseverance to be impactful.

Life Satisfaction was not correlated with social impact. However, there is strong evidence in the positive psychology research indicating that life satisfaction is correlated with success for a lot of different groups of people.

No virtue significantly correlated with life satisfaction. A plausible explanation for this finding is that life satisfaction is correlated with the use of an individual's unique pattern of character strengths. Previous research has found that people who report having opportunities to use their strengths report higher life satisfaction (Peterson & Seligman, 2004). Especially since research suggests leaders should utilize their top personal strengths, virtues may correlate to life satisfaction if considering groupings of leaders based on differing leadership styles.

Character strengths of zest (as hypothesized) and humility significantly and positively correlated with life satisfaction. Creativity was negatively and significantly correlated with life satisfaction. People with zest bring an excitement and enthusiasm to everything they do so it makes sense that they find more joy in their life. This finding is corroborated by the (Peterson et al., 2007) research discussed in section X under hypothesis 6. The significant relationship between humility and life satisfaction may reflect that social entrepreneurs must find ways to

stay grounded and satisfied while dealing with the difficult failures of not always being able to change the system. Furthermore, humility in a group of otherwise very ambitious people could help social entrepreneurs stay happy and while not being too hard on themselves when experiencing organizational disappointments.

As discussed in *Interview Findings*, social entrepreneurs derive a substantial portion of their life-satisfaction from the success and failures of their organization. While creativity's negative correlation with life satisfaction seems counterintuitive when viewed outside of this context, it is also negatively correlated with social impact and may reflect that social entrepreneurs who are not impactful will likely also feel unsatisfied in their lives.

Results revealed no significant relationship between social impact and whether the participant had personal experience with the problem. This is plausible. One potential distinction to consider is that much of the background research that influenced this hypothesis was on traditional, for-profit entrepreneurs. While the problems of an artificial intelligence company trying to bring new products to market may not be immediately obvious unless you're using AI daily, many entrenched social problems are obvious. Perhaps the key to being socially impactfully then is not personal experience, but some other key advantage. This might include having deep business expertise, privilege and connection to valuable resources like wealth or political power, or knowing the right social change partners in the right geography.

For individuals without a personal experience, forgiveness is a positive predictor of social impact and approaches significance. For those with a personal experience, humility is a negative predictor of social impact and approaches significance. The humility result is aligned with my initial *Hypothesis 3* that humility would be negatively correlated with social impact. This finding is also consistent with the experience of social entrepreneurs reported in interviews. If someone

starts an organization for personal reasons instead of the business opportunity or some other passion, it possible that humility limits their ability to fundraise and thus drive impact.

If this result holds, it means that there is a significant interaction between these character strengths, personal experience, and social impact, such that the effect of forgiveness on social impact is dependent on whether or not someone has had a personal experience of the problem. However, there was a large number of comparisons and there is no clear indications of this correlation in the literature so this was likely a spurious result.

That said, I personally have not experienced many of the hardships social entrepreneurs seek to solve, and have forgiveness as one of my highest rate strengths. One plausible explanation is that those who forgive easily have the empathy necessary to understand that other people are only human, and thus inspire more productivity and impact from their teams. However, it is unclear why this relationship would characterize only social entrepreneurs who do not have a personal experience of the problem.

Interview Findings

I interviewed 4 social entrepreneurs who participated in the survey, 2 from India and 2 from the United States. To protect their identity, real personal or company names are not used. Quotes from these conversations are referenced throughout.

Abigail is a serial technology founder who started founding social ventures after taking a company from startup to IPO in 1999. As founder of KidWise in Austin, Texas, USA, she now provides easy-use applications for kids to make wiser decisions. *Afshan* is a former software engineer who founded The Bee's Knees to help save bees by educating people on their importance, relocating hives, and selling top quality honey and other beeswax products in Pune, India. *Mike* founded BacktoSchool in Austin, Texas, USA to provide a mentorship program that

helps people working full-time graduate with an online college degree. *Raj*, founder of the Help Other People (HOP) Foundation, focuses on increasing equal access to education and livelihood through rural education, sustainable agriculture, and prison reform in Delhi and Madhya Pradesh, India. The trends belows are derived from interviews with these social innovators.

Applying character strengths is applicable to social entrepreneurs. The first and perhaps most important takeaway from my interviews is that relevant and clear applications of character strengths to the work of social entrepreneurs exist. Every social entrepreneur I interviewed, despite having little to no experience of character strengths, could immediately find ways in which their character strengths benefits or, at times, disadvantaged them in their daily work. Furthermore, as agents of change themselves and resource-strapped leaders, social entrepreneurs are always looking for an edge. Thus they are prime candidates for research on the application of character strengths.

Bravery is a key character strength to founding a social enterprise. Social entrepreneurs are enemies of the status quo. They stand up for a position that the system and many other people are aligned against. They not only are advocates for social change, they are willing to make difficult decisions prioritizing resources for their cause over many others. Furthermore, they are selecting a career path that is in many ways uncharted and require them to make different compared to their peers. In conversations with my advisor, Lee Walker, he could not stop coming back to the idea that bravery was one of the key signature strength for social entrepreneurs. This finding was backed up by the interviews with social entrepreneurs.

Raj was “initially surprised to see bravery” as one of his top strengths, but realized it was logical upon reflection. He has always “been the type of person who was willing to stand up and speak out” on behalf of justice, “even when 9 of 10 other people in the room” disagreed.

Furthermore, he diverged from the path that his family wanted for him and that all of his fellow finance students at university were following to become a social entrepreneur.

Afshan left his well-paying job as a software-engineer to pursue a passion project with potentially very little lucrative value: beekeeping, bee education, and moving hives to save bees. When he got involved, he “didn’t even consider the future or making money.” He has become known as the Bee Man of Pune and pursue his mission despite being surrounded by “people that care and know very little about the values bees bring to the world” as pollinators. Furthermore, he fights the battle despite believing that his side has lost the war. Afshan says that “the future for bees in India will most likely result in extinction”, but he created The Bee’s Knees anyway because he knew there was no way he “could stand by silently while bees were destroyed.”

Mike decided toward the end of college to dedicate his life toward the betterment of others, but knew that would mean a much different lifestyle. Less money to spend on traveling, nice experiences, or going out with friends. It is bravery that initially pushed him to become a social entrepreneur. Then, to start BacktoSchool, he had to be brave enough to bet on his idea despite the odds stacked against him. He had spent time working on rural development in Guatemala, yet realized he “was not adding value” there. When he came back to Austin, he created a social enterprise that failed. In starting BacktoSchool, a program that had no similar organizations on which to model itself, he must have had questions about whether he was the right person or whether this idea could even work since no one else was doing it. Bravery is the fact that he went for it anyway.

When reflecting on bravery as a social entrepreneur’s strength, Professor Walker recalled stories of his widowed grandma going out to feed homeless men in South Texas in the 1940’s despite the societal stigma and potential personal danger. He also reflected on his time as a

Board member at the LIVESTRONG Foundation and the day when Lance Armstrong announced he cheated. 85% of LIVESTRONG's revenue, sponsorships, and fundraising went out the door within two days. His friends advised he quit the board. He stayed on despite many board and team members quitting because he was in it for the cause of curing cancer, not the celebrity and potential admiration that comes with non-profit work at such a well-known organization.

Professor Walker's decision to rebuild the foundation in its greatest hour of need is just one example of the daily bravery of social entrepreneurs.

Humility receives poor reviews as a character strength for social entrepreneurs. Humility was one of two character strengths that I hypothesized would negatively correlate with social impact. Interestingly, both Abigail and Mike had humility among their top 5 character strengths. Neither one was particularly pleased with how it plays into their careers as social entrepreneurs. Both comment on how it improved their ability to uplift team members because they are comfortable handing the spotlight to someone else. It enhances team members' feeling of responsibility and ownership over certain parts of the business.

However, one of the keys to scaling a social enterprise, or most any venture, successfully, is the ability to raise funds. Both Mike and Abigail commented on how they feel humility really hampers their ability to fundraise. Mike always feels the need to qualify statements of impact because of the messiness in measuring educational outcomes. While donors/investors want a sentence of the impact their funds can make, Mike wants to give 3 paragraphs explaining all the potential caveats. Bold vision and the confidence that you will definitely execute the plan attracts donors. Honesty is another signature strength of Mike's and often the most honest analysis of a complex situation raises less money than a generally true summary of impact. Abigail pointed out the research around how issues of humility especially affect women in the workplace. Along

with her co-founder, Abigail says overcoming their humility enough to fundraise the money they desperately need to scale has become a real challenge.

Personal privilege can be as vital as personal experience. Motivations for founding an organization are varied, but both having or not having a personal experience can prove beneficial. While 68% of survey respondents said they have personally experience the problem they seek to solve, my interviewees were not reflective of this results. 3 of the 4 had no personal experience. Instead, how these 3 used the privilege of not experiencing the problem has helped them drive social impact.

Mike has no personal experience of the problem BacktoSchool solves. His founding story actually began when he was hired as a contractor by a business owner hoping to understand how to increase the college graduation rate for their landscaping employees. Working 2 high school summers at a fast-food restaurant, Mike remembered the struggles of people who gave everything for their families yet couldn't see a pay increase due to lack of higher education. He now leverages his privilege to help those who cannot catch a break. Once he saw the market gap, realizing no comprehensive service existed to support these students, he created a successful mentorship program for the rising rates of non-traditional students. He utilized his upbringing surrounded by upper-middle class and the prestige of a college education at Vanderbilt University to build trust with, create partners in, and fundraise from established connections throughout the Austin community.

Raj has no personal experience of any the problems HOP Foundation solves. His founding stories began serendipitously. He was on a 3 day visit to the rural Satpura Forests where a friend was researching the Korku tribe. He fell in the love with the people and 3 days became a month. Now he helps the Korku farm sustainably and sell directly to consumers in

Delhi. Similarly, a friend suggested he get lunch with the new director of Delhi's Tihar Prison. They hit it off and the director asked him to create a reformation program. In both instances, despite no personal experience, Raj was open to opportunity and had background experience as a Clinton Foundation Fellow and finance student. He utilizes the privilege of a global perspective, business education, and Clinton Foundation relationships to drive real impact for these communities.

While as a child, Abigail was privileged with a loving and open support system in her family and teachers. While the children she now serves do not have this luxury, Abigail has built them a tool to help replicate much of the same support. Furthermore, she leverages her business experience in innovative technology and design to bring experiences and advantages most mission-driven organizations lack. This helps to ensure she can scale and is running an organization that actually achieves results for her beneficiaries, the consumer.

Social impact drives life satisfaction for social entrepreneurs. While the survey results do not necessarily defend this conclusion, the interviews spoke loud and clear. Many people consider their work as a 9-5 pm job to be a necessary evil to do the things they enjoy in life, like spend time with family and friends or partake in hobbies. Not social entrepreneurs. As Jonathan Lewis in *The Unfinished Social Entrepreneur* writes, "Social entrepreneurship is the most fun I'm allowed to have in public." These interviewees all describe their work as a calling and it showed in conversations about how much their organization determined their life satisfaction. They derive energy and happiness from their passion, their social enterprise.

One of the social entrepreneurs, who was below average in their life-satisfaction score, said it was likely because they were experiencing frustrating business disappointments. Another, who is an admitted workaholic, said that in other important aspects of their life including

romantic and platonic relationships, personal health, and spirituality, they are deeply unsatisfied. It is currently only their organization in which they find happiness, so struggles or failures can be devastating to their life. Mike's signature strengths include humility and spirituality. While he generally considers a substantial portion of happiness tied to his organization, his faith and humble attitude provide him with perspective and a sense of calm regarding BacktoSchool's success.

A another dive into the application of character strengths and findings from these interviews exist in Chapter 3.

Limitations

The first and perhaps biggest limitation of this study is the relative lack of statistical power. Since $n=33$ for analysis using character strengths or virtues, some of the findings could reflect chance results due to the large number of analyses conducted. This factor becomes quite limiting when hoping to breakdown the survey pool into smaller groupings, such as Americans and Indians, those with and without personal experience, or based on collegiate background. Especially when running a best model analysis with 24 predictors, it is likely that 1 in 24 strengths turns out to be significant if only because the random odds are higher than the 1 in 20 odds of a $p=.05$ significance level.

Self-reporting is a limiting factor for many studies, as these "measures [are] susceptible to common method bias, social desirability, and even motivated efforts to exaggerate, at least to some extent" (Frese, 1985; c.f. Littman-Ovadia & Lavy, 2016). Especially when asking busy social entrepreneurs to take an online survey in an uncontrolled environment, the responses might not be as accurate as they otherwise should be. This was a problem experienced with some

survey responses that included the same answer for 20 straight questions on the VIA Character Strengths Survey.

Since the study used a cross-sectional design, it can only delineate correlation and provides no evidence towards claims of causation. A myriad of other factors could explain the results, and any pattern of correlational findings would not necessarily support suggestions for behavior change.

Since the survey targeted people in India and the United States, it would have been ideal to offer the survey in Hindi as well. English is not the first language of many Indians social entrepreneurs, so there could have especially been confusing surrounding the meaning of the short phrases of the character strengths survey.

An additional limitation is the veracity of the Legatum Foundation's Social Impact Index. Finding a statistically verified measure of social impact that can be taken in a short period of time, measures impact across a range of verticals, and has owners who are willing to share how to calculate the final score proved to be very difficult. The Legatum Foundation's Social Impact Index has been beneficial in that it is relatively short, has been verified by comparing hundreds of projects, and is scored on a continuous scale. However, the scale does not have a specific measure for environmental impact and was initially based on projects Legatum funded and ran by NGOs and non-profits exclusively in developing nations. A tendency for self-reported over exaggeration is at play here especially because people may not have the answers to relatively abstract questions about their social impact that they do not currently measure.

Finally, the results were limited by decisions I had to make to shorten the survey enough to get at least 30+ social entrepreneurs to take it. The VIA character strengths survey was only 72 questions as opposed to the my initial choice of the 120 question survey or long version 240

question survey. This means that only 3 questions (as opposed to 5 or 10) were used to determine the score for each strength, a relatively small sample size. I also was initially investigating correlation with the financial success of the organization. However, in the first few iterations, no one filled out the financial responses or they dropped out at that part of the survey. Thus I pivoted to a shorter survey to increase the response rate.

Due to limitations of time and limited responses, analysis of qualitative responses in the survey such as “what is your motivation for running this organization” or “describe your personal experience of the problem” were limited.

Areas for Future Research & Practical Implications

My study would benefit from being replicated with a much larger pool of participants to increase the statistical power of the results and, for cross-cultural research, consider using measures written in the native language of participants. A second trial should consider utilizing a more verifiable or objective measure of social impact that is specific to social entrepreneurs as opposed to social change in general.

There are quite a few practical implications for this research. One potentially exciting deep dive would be a follow up to our results that personal experience is negatively and significantly correlated with life satisfaction. Either developing interventions that help social entrepreneurs increase life satisfaction while focusing on a problem they have experienced, or encouraging social entrepreneurs to focus on problems they have not experienced because of the negative personal side effects are two potential results.

Social entrepreneurs who build a deeper understanding of their signature strengths and how to can apply them will, at the very least, add another tool to their leadership toolbox. Raj describes how much he enjoyed learning about his strengths and plans to ask his colleagues for

further feedback on how he should utilize them. This research will hopefully open the eyes of social entrepreneurs to taking this test and learning more about their strengths.

There is mounting evidence that finding better ways to utilize strengths, instead of a way to reduce deficiencies, is more beneficial to work performance. This strengths-based approach to improved performance will only grow in importance in the knowledge economy. Technology will continue filling the gaps for human deficiencies at an exponential rate and specializing in a talent while building on your own strengths is going to be integral to the success of social organizational. Currently, much of the research evidence is based in the private sector.

One of the most promising areas for future research is deepening understanding of how social entrepreneurs apply their character strengths. More qualitative and observational research should be done to understand how social entrepreneurs could be applying their strengths and to develop specific hypothesis. Then a study exploring whether strength applications *cause* social impact would be quite valuable. This could be conducted with an intervention asking social entrepreneurs to apply signature strengths in their work in new ways. Since my entrepreneurial nature cannot help itself, once a research base is built around this area of knowledge, a technology should be created with artificial intelligence that provides social entrepreneurs with personalized recommendations for how social entrepreneurs should apply character strengths to their social enterprise based on their personalized signature strength results, their personal experience of the problem, and the size, problem area focus, geography, and needs of their social enterprise.

Overall, this research is exploring an important topic because it helps us to better understand the personal traits of people seeking to improve the world, and how they can better utilize those characteristics to achieve their goal. More research in this area is needed to build

evidence for this relatively novel knowledge base, but the early findings are promising in suggesting a connection exists. As the relatively new area of character strength application to workplace settings continues to grow, findings may be applied to understand and improve the social impact and life satisfaction of social entrepreneurs.

Appendices

Appendix A. Recruiting Emails via mail merges

Subject: Social entrepreneur thesis research survey/\$100 gift card!

Hi {First Name},

I hope you are well. The work of {Organization} is making an inspiring impact! As a University of Texas senior, I am currently writing my honors thesis on “Characteristics of Successful & Impactful Social Entrepreneurs Across Cultures.” {Personal Note}

I know how busy you are, but would seriously appreciate if you could help the social enterprise community by **filling out this survey**, and/or **forwarding it to other social entrepreneurs** in your network from India or USA. The survey will take about **20 minutes and is due March 7th**. Please let me know if you need an extension.

This research will help us understand how social entrepreneurs can better leverage personal strengths to further their organization's impact. By participating, you will create knowledge on why certain social entrepreneurs are successful and impactful, can learn your character strengths, and be entered into a **drawing for a \$100 Amazon gift card!**

Thank you in advance for your consideration and kindness in helping us learn about the work you do. I look forward to speaking with some of you in the optional follow-up interview. Please email me at mickywolf@utexas.edu with any questions.

Best,

Micky

Subject: Please help: shorter social entrepreneur thesis survey/\$100 gift card!

Hi {First Name},

I hope you are well. {Organization Name} is making an inspiring impact! I am currently writing my University of Texas at Austin honors thesis on “Characteristics of Impactful Social Entrepreneurs Across Cultures.” {Personal Note}

I know you are busy, but would appreciate you helping other social entrepreneurs and me by [answering this survey](#), and/or [forwarding it to social entrepreneurs](#) in your network in India or the USA. The survey is now just **10 minutes and due March 28th**.

This research will help us understand how social entrepreneurs can better leverage personal strengths to further their organization's impact. By participating, you will create knowledge on why certain social entrepreneurs are impactful, can learn your character strengths, and be entered into a **drawing for a \$100 Amazon gift card!**

Thank you in advance for your consideration and kindness in helping us learn about the work you do. I look forward to speaking with some of you in the optional follow-up interview. Please email me at mickywolf@utexas.edu with any questions.

Best,

Micky

Appendix B. Follow-up Interview Questions

Social Entrepreneurial Journey:

- Why do you do what you do?
- What are the most challenging aspects of your job as a social entrepreneur?
- What sustains you when the going gets tough?

Character Strengths:

- These are the descriptions of your top 5 character strengths. How do you use your top 5 character strengths advantage or disadvantage you in running your organization?
- Which character strength do you wish you had to better your organization?
- Which character strengths do you think the best social entrepreneurs possess?

Personal Experience:

- If applicable, describe your personal, lived experience of the problem you are seeking to solve with your organization?
- How did you decide to focus on this particular problem? Was there a moment where you realized that this was the problem you wanted to solve?
- If applicable, tell me the story of the founding of your organization?
- How does your personal experience or lack of experience of this problem affect your decisions about your organization?
- Do you find your personal experience/inexperience of the problem to be valuable or detrimental?

Social Impact:

- How do you measure social impact in your organization?
- What are your biggest obstacles to measuring social impact?
- What are the key goals in terms of the social impact you are hoping to drive?

Personal Happiness:

- What are the top drivers of your personal life satisfaction?
- Does your organization/business affect your life satisfaction? If so, in what ways?
- How much of your personal happiness is tied the social impact of your organization?

Appendix C. Satisfaction with Life Scale.

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number in the line preceding that item. Please be open and honest in your responding.

1= Strongly Disagree; 2= Disagree; 3= Slightly Disagree; 4=Neither Agree or Disagree; 5= Slightly Agree; 6= Agree; 7= Strongly Agree

LFS 1. In most ways, my life is close to ideal.

LFS 2. The conditions of my life are excellent.

LFS 3. I am completely satisfied with my life.

LFS 4. So far I have gotten the most important things I want in life.

LFS 5. If I could live my life over, I would change nothing.

Appendix D. Table Explanation Glossary

- Virtues are sometimes in blue with character strengths categorized below their corresponding virtue
- Correlation coefficient is the correlation of a IV to a DV (scale of -1 to 1)
- Yellow indicates a positive correlation of 0.10 or 0.20 and higher depending on the Table. Red indicates a negative correlation of 0.10 or 0.20 and lower depending on the Table.
- Negative t-value indicates negative correlation
- Models with the lowest BIC scores were preferred
- Based on the raw scores, strengths are ranked from 1-24 and virtues are ranked 1-6, with 1 being a person's strongest virtue/strength

- Life Satisfaction is scored on a scale of 5-35 and is a total of individual scores of 5 distinct questions
- PE= personal experience of the problem their organization seeks to solve
- NPE = no personal experience of the problem their organization seeks to solve
- Social Impact Index is on a scale of 20-100 and is the study's measure for social impact
- Standard deviations that are substantially larger than the mean for total direct beneficiaries and total actual expenditure indicate a few outliers that brought up the mean by a large amount
- Significance codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1;
- Interaction references if a character strength's effect on social impact is dependent on whether or not someone has had a personal experience of the problem
- PE= personal experience of the problem their organization seeks to solve
- NPE = no personal experience of the problem their organization seeks to solve
- Significance codes: 0; '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1;
- Stand. Dev.= Standard Deviation

Chapter 3: How Social Entrepreneurs Apply Their Characteristics

Character Strengths Use Research

As positive psychologists have developed a greater understanding of character strengths, one of the field's most exciting development is the application of character strengths to improve outcomes. "Practitioners ranging from psychologists and coaches to business leaders and educators are eager to find ways to apply the research to their practices" (Niemiec, 2013).

The most popular intervention to date regarding strengths use was developed by Martin Seligman and involves utilizing signature character strengths in at least one new way every day over a week long intervention (i.e. using the character strength of judgment to consider a new business deal only from the viewpoint of a potential partner). This research has been applied across age groups and in various situations. Signature strengths use is correlated to greater progress on goals, meeting basic psychological needs (autonomy, relatedness, and competence), and higher overall well-being (Linley et al., 2010). “Finding novel ways to use signature strengths was a core part of a coaching program for youth that led to increases in the students’ self-reported levels of engagement and hope” (Madden, Green, & Grant, 2011).

While not directly tied to work performance or entrepreneurship, there are many theoretical implications to suggest that social entrepreneurs, more than most people, would benefit from using their character strengths. As people founding or running organizations, social entrepreneurs take proactive behavior and personal initiative, which both positively correlate with strengths use behavior (van Woerkom, et al., 2016). Entrepreneur is the type of job that “offer[s] more opportunities for strengths use than others, for instance, because these jobs provide higher levels of job autonomy” (Bakker & van Woerkom, 2017). “Self-determination theory (Deci & Ryan, 2000) proposes that conditions supporting the need for autonomy, competence, and relatedness foster well-being and performance. Strengths use fosters these needs by allowing individuals to express their authentic self, use their capabilities, and thereby increase the chance that others will see them as they see themselves, leading to positive relationships” (van Woerkom, et al., 2016). Entrepreneurs work extremely autonomously, by definition should hire people with different skill sets so that they can utilize their strengths, and

must build authentic relationships with beneficiaries, team members, donors, and customers to be successful.

Why Strengths Should Be Used at Work

A bulk of the research regarding strengths use has involved employees using strengths at work and organizations supporting this use of strengths. This research has a deep theoretical backing. “According to the “happy-productive worker thesis,” happy workers perform better than their less happy colleagues (Cropanzano & Wright, 2001) because they set higher goals, invest more effort in these goals, and are better at mobilizing social resources that may help them to achieve these goals” (Bakker & van Woerkom, 2017). Using strengths leads people to experience one of the key drivers of motivation in the knowledge economy, mastery. Self-efficacy theory (Bandura, 1997) indicates that mastery, and therefore strengths use, leads to improved performance. “Employees who use their strengths capitalize on their abilities and research has shown that there is a linear relationship between ability and performance (Coward & Sackett, 1990)... Employees who work in areas that suit their strengths experience higher levels of positive affect and well-being (van Woerkom & Meyers, 2015; Wood et al., 2011), which are both linked to job performance (Wright & Cropanzano, 2000)... Meyers et al. (2015) found that a strengths intervention led to significant increases in hope and resilience, which are both related to performance (Luthans, Avolio, Avey, & Norman, 2007)” (van Woerkom et al., 2016).

However, strengths use research has been more than theoretical. The evidence suggests that organizations should encourage employees to use strengths “because when employees do so they are energized and may flourish... Correlational studies have indicated that strengths use is positively related to employee work engagement and well-being (Botha & Mostert, 2014; Harzer

& Ruch, 2012, 2013; Keenan & Mostert, 2013; Stander & Mostert, 2013; Stander, Mostert, & de Beer, 2014), self-esteem (Wood et al., 2011), and self-efficacy (van Woerkom, Oelemans, & Bakker, 2016), and negatively related to stress (Wood et al., 2011). In addition, strengths use is positively related to self- and other-ratings of job performance (Dubreuil, Forest, & Courcy, 2014; Stander et al., 2014; van Woerkom & Meyers, 2015; van Woerkom, Mostert, et al., 2016; van Woerkom, Oerlemans, & Bakker, 2016)” (Bakker & van Woerkom, 2017). There are “significant positive relations between strengths use behaviour and self-rated performance ($r = .32, p < .01$), manager-rated behaviour ($r = .19, p < .05$), and manager-rated results ($r = .21, p < .01$). These results support our hypothesis 8, predicting a positive relationship between strengths use behaviour and performance” (van Woerkom, et al. (2016)).

Deficit correction, or improving on employee weaknesses, is currently the more popular and widely accepted mechanism for improving work performance. However, “strengths use behavior was positively related to manager ratings of job performance, whereas deficit correction was not” (Bakker & van Woerkom, 2017). In fact, “the more signature strengths were applied at the workplace, the higher the positive experiences at work... character strengths matter in vocational environments irrespective of their content” (Harzer & Ruch, 2013). Working to improve strengths, not reduce weaknesses, will lead to more permanent and substantial improvements in work performance.

How to Apply Strengths

While the correlational research is important, there is increasing evidence that strengths use intervention cause an increase in certain outcomes. “Harzer and Ruch (2015) showed that a strengths use intervention led to an increase in the perception of one’s job as a calling as well as an increase in life satisfaction. Forest et al. (2012) showed that a comparable strengths

intervention increased participants' use of their signature strengths and sense of harmonious passion for work, which in turn led to higher levels of well-being" (Bakker & van Woerkom, 2017). So how can these strengths be applied?

For managers and entrepreneurs hoping to focus on strengths use support, they must be consciously avoid "simply empowering employees or providing them with autonomy [because]... workers who feel empowered may still not be aware of their strengths and, therefore, not able to think about new ways to apply their strengths in their job" (Bakker & van Woerkom, 2017). Organizations and entrepreneurs must make a deeply conscious effort to focus on strengths use interventions as opposed to similar alternatives because "humans are preprogrammed to pay attention to their weaknesses instead of their positive qualities (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005; Rozin & Royzman, 2001). Strengths often come so naturally to a person that they are used unconsciously; therefore, many people have trouble identifying their strong points (Buckingham & Clifton, 2001)... and both individuals and organizations tend to pay more attention to weaknesses than to strengths (Roberts, Dutton, Spreitzer, Heaphy, & Quinn, 2005; Rozin & Royzman, 2001)" (Bakker & van Woerkom, 2017).

In the research around strengths use, certain interventions have begun to emerge as ways to help workers improve performance by using their strengths. Seligman's intervention of using signature strengths in a novel way each day for a week is a test backed by evidence, despite the brevity of the intervention. Another popular intervention is a three step process called aware, explore, and apply. Becoming aware of strengths "is a critical task as Linley (2008) has reported that fewer than 1/3 of individuals have a meaningful understanding of their strengths" (Niemic, 2013). The intervention's next step involves exploring strengths by considering when "they have previously used strengths at their best and worst and how they might tap into strengths to create a

best possible future. Exploration is followed by the application of an action plan or goal targeted to improve a particular strength” (Niemiec, 2013).

Possible Ways for Social Entrepreneurs to Leverage Strengths

The main conclusions regarding strength applications are above and in *Interview Findings*. Based on the interviews, research, and my own ideas on how social entrepreneurs can apply strengths, here are a few preliminary approaches for social entrepreneurs to better leverage virtues and character strengths.

Find a mentor for perspective. Jonathan Lewis, in *The Unfinished Social Entrepreneur*, writes about the importance of having mentors and colleagues in the space with which you can bounce ideas off and share struggles. Learning from mentors is one of the best ways to develop perspective. (Gluck & Baltes, 2006) Social entrepreneurs need perspective, especially to deal with potential failures. These mentors can help them better leverage the strength of perspective.

Create reminders of the endgoal for courage. The character strengths categorized under courage were of deep interest to me throughout my research. When looking at strategies people employ to increase courage, “the most common approach was outcome-focused strategies in which individuals thought of the outcome of the courageous act- thinking of the person being helped, reminding themselves that it was the right thing to do, or remembering that there was an obligation to act” (Pury, 2008).

Posters with the organization’s mission, beginning each meeting with a reminder of the organization’s mission, and spending a few minutes in meditation every week envisioning the fruition of the long-term vision is a few ways entrepreneurs can become more outcome focused with hopes of increasing their courage. Many people avoid the unpopular or controversial

opinions in deference to the status quo and a simpler life. That's simply not an option for social entrepreneurs hoping to change the system.

Use humor to lighten load of the work. Raj's top strength was actually humor. Sometimes his team members do not know how he can be so humorous while staring into the face of horrible systemic challenges to overcome. Changing Indian prison education or providing livelihood in rural India is no easy task. However, Raj purposely deploys humor to lighten the burden on his team members. He knows how draining it can be to face these challenges, but needs them to be engaged and brilliant, not down in the dumps about the prospect of the difficulties and impoverished lives of their beneficiaries. Sometimes, changing the system requires a willingness to laugh at yourself and life despite the seriousness of the challenges.

If I could write a second thesis, I would dive deeper into the applications of strengths. This is a topic rich for exploration moving forward and will be helpful for future generations of social entrepreneurs as more is learned.

Conclusion

As I discussed my final thesis with my thesis advisors, Professor Walker mentioned how integral my paper has seemed like it is to me as person. I couldn't agree more. This paper has been a deep and full circle exploration of my first-principle inquiries that led to finding the topics that led to my thesis research: How can I leave the world a better place than I found it? and How can I be happy?

This thesis research led me to explore a new major in psychology and travel to India. I gained a whole new perspective on how my career can be applied at the intersection of these fields. I learned how to use the important statistical analysis tool, R. I submitted a Fulbright fellowship application based on applying my thesis research to helping social entrepreneurs

better their leverage their character strengths. It may even eventually lead me to a future social venture coaching social entrepreneurs to better leverage their character strengths.

Upon completion of my research, my advisors asked me if there was a type of social venture I see myself starting, a problem I had a burning passion to solve. The short answer is: no, I don't. However, as I graduate from the University of Texas at Austin, I plan to cultivate and leverage the character strengths of the types of social entrepreneurs my research indicates are happiest and most impactful: those leading with kindness, bravery, and zest.

References

- Achor, S. (2010). *The happiness advantage: The seven principles of positive psychology that fuel success and performance at work*. New York: Broadway Books.
- Algoe, Sara B. Algoe & Haidt, Jonathan (2009) Witnessing excellence in action: the 'other-praising' emotions of elevation, gratitude, and admiration, *The Journal of Positive Psychology*, 4:2, 105-127, DOI: [10.1080/17439760802650519](https://doi.org/10.1080/17439760802650519)

- Bakker, A. B., & van Woerkom, M. (2017). *Strengths use in organizations: A positive approach of occupational health*. Canadian Psychology. Np. DOI: <http://dx.doi.org/10.1037/cap0000120>
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26, 325–346. doi:10.1080/00461520.1991.9653137
- DeSilver, D. (2017, February 15). U.S. students academic achievement still lags that of their peers in many other countries. Retrieved from <http://www.pewresearch.org/fact-tank/2017/02/15/u-s-students-internationally-math-science/>
- Diener, E. (2001). Satisfaction with Life Scale. Retrieved from <http://www.midss.org/content/satisfaction-life-scale-swl>
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087-1101. doi:10.1037/0022-3514.92.6.1087
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, 84(2), 377-389. doi:10.1037/0022-3514.84.2.377
- Fink, L. (2018, February). Larry Fink's Letter to CEOs. Retrieved from <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>
- Gluck, J., & Baltes, P. (2006). Using the concept of wisdom to enhance the expression of wisdom knowledge: Not the philosopher's dream but differential effects of developmental preparedness. *Psychology and Aging*, 21(4), 679-690. doi:10.1037/0882-7974.21.4.679
- Harzer, C., & Ruch, W. (2013). The application of signature character strengths and positive

- experiences at work. *Journal of Happiness Studies*, 14, 965–983.
<http://dx.doi.org/10.1007/s10902-012-9364-0>
- Harzer, C., & Ruch, W. (2014). The role of character strengths for task performance, job dedication, interpersonal facilitation, and organizational support. *Human Performance*, 27, 183–205. <http://dx.doi.org/10.1080/08959285.2014.913592>
- Harzer, C., & Ruch, W. (2015). The relationships of character strengths with coping, work-related stress, and job satisfaction. *Frontiers in Psychology*, 6, 165.
<http://dx.doi.org/10.3389/fpsyg.2015.00165>
- Hofstede. (2016). Country Comparison. Retrieved from <https://www.hofstede-insights.com/country-comparison/india,the-usa/>
- Hsieh, Tony. (2010) *Delivering happiness: a path to profits, passion, and purpose* New York : Business Plus, 2010. Print.
- Kahneman, D., & Deaton, A. (2010). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences of the United States of America*, 107, 16489–16493. <https://www.businesstoday.in/current/economy-politics/india-has-highest-number-of-people-living-below-poverty-line-world-bank/story/238085.html>
- Krige, A. (2013, June 11). History's Social Entrepreneurs. Retrieved from <http://www.ngopulse.org/article/history's-social-entrepreneurs>
- Landrum, S. (2017, March 17). Millennials Driving Brands To Practice Socially Responsible Marketing. Retrieved from <https://www.forbes.com/sites/sarahlandrum/2017/03/17/millennials-driving-brands-to-practice-socially-responsible-marketing/#7c5c8e724990>

- Legatum Foundation. (n.d.). *Social Impact Index*. Retrieved from <http://www.legatum.org/sii>
- Liang, J., Krause, N. M., & Bennett, J. M. (2001). Social exchange and well-being: Is giving better than receiving? *Psychology and Aging, 16*(3), 511-523. doi:10.1037/0882-7974.16.3.511
- Linley, P. A., Harrington, S., 1962, & Garcea, N. (2010). *Oxford handbook of positive psychology and work*. New York;Oxford;: Oxford University Press.
- Littman-Ovadia, H., & Lavy, S. (2012). Character strengths in Israel: Hebrew adaptation of the VIA inventory of strengths. *European Journal of Psychological Assessment, 28*, 41–50. doi:10.1027/1015-5759/a000089
- Littman-Ovadia, Hadassah & Lavy, Shiri (2016). Going the Extra Mile: Perseverance as a Key Character Strength at Work. 2016. *Journal of Career Assessment, 24*(2), 240-252. Web.
- Lounsbury, J. W., Fisher, L. A., Levy, J. J., & Welsh, D. P. (2009). Investigation of character strengths in relation to the academic success of college students. *Individual Differences Research, 7* (1), 52-69.
- Markell, G. J. (2013, September 21). A New Kind of Corporation to Harness the Power of Private Enterprise for Public Benefit. Retrieved from https://www.huffingtonpost.com/gov-jack-markell/public-benefit-corporation_b_3635752.html
- Martin, & Osberg. (2007). Social Entrepreneurship: The Case for Definition (SSIR). Retrieved from https://ssir.org/articles/entry/social_entrepreneurship_the_case_for_definition
- Neve, J. D., & Oswald, A. J. (2012). Estimating the influence of life satisfaction and positive

- affect on later income using sibling fixed effects. *Proceedings of the National Academy of Sciences of the United States of America*, 109(49), 19953-19958.
- doi:10.1073/pnas.1211437109
- Niemiec, R. M. (2013). *VIA character strengths: Research and practice* (The first 10 years). In H. H. Knoop & A. Delle Fave (Eds.), *Well-being and cultures: Perspectives on positive psychology* (pp. 11-30). New York: Springer.
- Owens, K. S., Kirwan, J. R., Lounsbury, J. W., Levy, J. J., & Gibson, L. W. (2013). Personality correlates of self-employed small business owners' success. *Work*, 45(1), 73-85.
- doi:10.3233/WOR-121536
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Pink, D. H. (2009). *Drive: The surprising truth about what motivates us*. Book.
- Pritzker, M. A. (2001). *The relationship among CEO dispositional attributes, transformational leadership behaviors and performance effectiveness*
- Ruch, W., Gander, F., Platt, T., & Hofmann, J. (2016). Team roles: Their relationships to character strengths and job satisfaction. *Journal of Positive Psychology*. DOI: <http://dx.doi.org/10.1080/17439760.2016.1257051>
- Sharir, M., & Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of World Business*, 41(1), 6-20.
- doi:10.1016/j.jwb.2005.09.004
- Soosai-Nathan, L. (2015). Altruism: A pathway for psychological well-being. *Indian Journal of Positive Psychology*, 6(1), 90.

van Woerkom, M., Mostert, K., Els, C., Bakker, A. B., de Beer, L., & Rothmann, S. (2016).

Strengths use and deficit correction in organizations: Development and validation of a questionnaire. European Journal of Work and Organizational Psychology, DOI: 10.1080/1359432X.2016.1193010

Yiu, D., Wan, W., Ng, F., Chen, X., & Su, J. (2014). Sentimental drivers of social

entrepreneurship: A study of china's guangcai (glorious) program. *Management and Organization Review*, 10(1), 55-80. doi:10.1111/more.12043

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social

entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519-532. doi:10.1016/j.jbusvent.2008.04.007